MITSUBISHI ELECTRIC

SPLIT-TYPE, AIR CONDITIONERS

No. OC155
REVISED EDITION-B

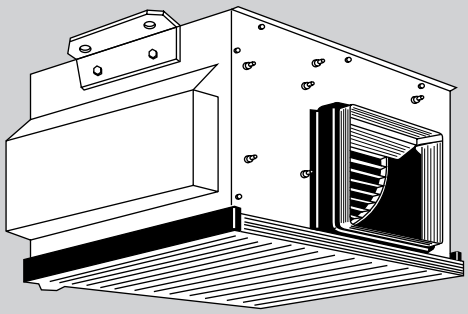
TECHNICAL & SERVICE MANUAL

Series PE Ceiling Concealed

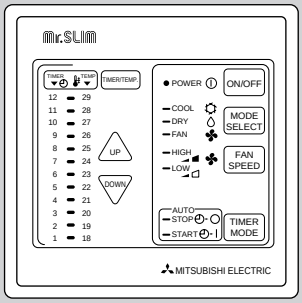
<Indoor unit>

[Model names]	[Service Ref.]
PE-3EJA	PE-3EJA2.TH PE-3EJA3.TH
PE-4EJSA	PE-4EJSA2.TH
PE-5EJSA	PE-5EJSA2.TH
PE-6EJSA	PE-6EJSA2.TH

PE-3EJA3.TH added in REVISED EDITION-B.
Please destroy OC155 REVISED EDITION-A.
This manual does not cover the following outdoor units.
When servicing them, please refer to the following service manual and this manual in a set.
[Service Ref.]
OC152 REVISED EDITION-A
PU-3VJA1.TH, 3YJA1.TH
PU-4VLJSA1.TH, 4YJSA1.TH
PU-5YJSA.TH
PU-6YJSA.TH
OC127 REVISED EDITION-A
PU-3NJA1
PU-4TJSA2
OC199
PU-5TJSA1
PU-6TJSA1
OC206
PU-3VJC.TH, 3YJC.TH



Indoor unit



Remote controller

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Mr.SLIM™

1 COMBINATION OF INDOOR AND OUTDOOR UNITS

Change points	Outdoor unit											
	3					4			5		6	
Service Ref.	VJA1.TH	YJA1.TH	VJC.TH	YJC.TH	NJA1	VLJSA1.TH	YJSA1.TH	TJSA2	YJSA.TH	TJSA1	YJSA.TH	TJSA1
PE-3EJA2.TH.	○	○	—	—	○	—	—	—	—	—	—	—
PE-3EJA3.TH.	—	—	○	○	○	—	—	—	—	—	—	—
PE-4EJSA2.TH.	—	—	—	—	—	○	○	○	—	—	—	—
PE-5EJSA2.TH.	—	—	—	—	—	—	—	—	○	○	—	—
PE-6EJSA2.TH.	—	—	—	—	—	—	—	—	—	—	○	○

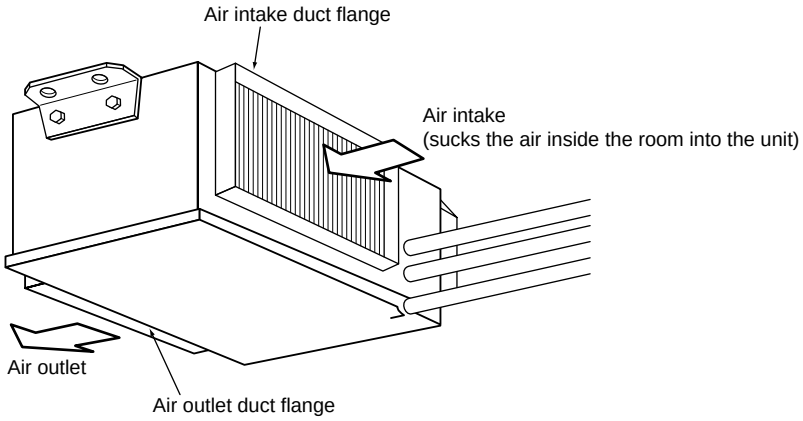
2 TECHNICAL CHANGE

Differences with PE-3EJA2.TH / PU-3VJA1.TH, PU-3YJA1.TH (OC155 REVISED EDITION-A)

Change points	PE-3EJA2.TH	PE-3EJA3.TH
COOLING CAPACITY	24,600 Btu/h 7,200 W	25,600 Btu/h 7,500 W
OUTDOOR UNIT	PU-3VJA1.TH PU-3YJA1.TH	PU-3VJC.TH PU-3YJC.TH
COMPRESSOR OUTPUT	2.2kW(PU-3YJA1.TH)	2.4kW(PU-3YJC.TH)

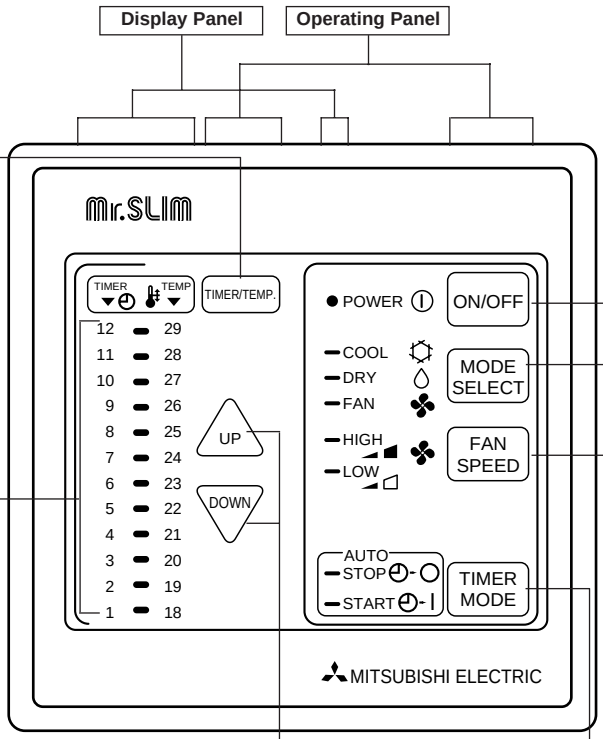
3 PART NAMES AND FUNCTIONS

● **Indoor (Main) Unit**



● Remote controller

Settings remain in effect until changed. Air conditioner can be operated by simply pushing ON /OFF button once settings have been made.



TIMER / TEMP.

This button is used to change between display of room temperature and display of remaining timer during "AUTO STOP" operation. Green lamps light in selected display mode.

Lamps display remaining timer time or room temperature.

Remaining timer time display

Lamps indicate time remaining until timer stops timed operation. Green lamps corresponding to remaining number of hours light.

Room Temperature display

Lamps display temperature settings and actual room temperatures.

- Temperature settings; Green lamps light.
- Temperature in room; Green lamps flash.

UP and DOWN buttons

- Temperature control (While "TEMP" green lamps is lit.)
  Use UP and DOWN buttons to set desired temperature between 18 and 29°C.
- Timed operation (While green "TIMER" lamp is lit.)
  Use UP and DOWN buttons to set timed operation between one and twelve hours.

ON / OFF button

Pushing button starts operation. Pushing again stops operation. Green lamp remains lit during operation

MODE SELECT button

This button is used to change between cooling, ventilation and DRY operation modes. One of three green lamps lights to indicate mode in effect.

FAN SPEED button

This button is used to change between low and high fan speeds. One of two green lamps lights to indicate fan speed in effect.

TIMER MODE button

Used for selecting timed starting or stopping. Green lamps lights to indicate timer mode selected.

(Example display readings are for explanations only ; actual display readings will differ.)

Attention :

- Pushing UP and Down buttons together for more than two seconds will initiate "trial run" or "inspection" mode. Avoid pushing these buttons simultaneously during normal operation. Push ON / OFF button to cancel trial run or inspection mode if initiated by accident.
- All green lamps turn off when air conditioner is stopped.
- Avoid operation of buttons with fingernails or other sharp objects. Sharp objects may scratch operating panel.

4 SPECIFICATIONS

1. STANDARD SPECIFICATIONS

Item / Service Ref.				PE-3EJA 2.TH	PE-4EJSA 2.TH
Cooling capacity ※1		50Hz	W	7,200	9,800
			Btu/h	24,600	33,400
		60Hz	W	8,100	10,900
			Btu/h	27,600	37,200
Cooling capacity ※2		60Hz	W	6,700	9,400
			Btu/h	23,000	32,000
Total input (50/60Hz) ※3			kW	3.41 / 3.76	3.59 / 4.69
INDOOR UNIT	**Service Ref.**			**PE-3EJA 2.TH**	**PE-4EJSA 2.TH**
	External finish			Galvanized sheets	
	Fan motor output		kW	0.2	0.3
	Airflow Lo - High	50Hz	m^3/min	19 - 22	27 - 34
			CFM	671 - 777	953 - 1,200
		60Hz	m^3/min	22 - 26	27 - 34
			CFM	777 - 918	953 - 1,200
	Ex. static pressure at Hi - notch	50Hz	Pa (mmAq)	49 (5)	62 (6.35)
		60Hz	Pa (mmAq)	69 (7)	62 (6.35)
	Operation control & thermostat			Remote controller & built-in	
	Noise level Low - High ※5	50Hz	dB	46 - 48	54 - 58
		60Hz	dB	48 - 50	54 - 58
	Unit drain thread		in.	R1	R1
	Dimensions	W	mm (in.)	785 (31)	1,055 (41-1/2)
		D	mm (in.)	690 (27-1/6)	690 (27-1/6)
		H	mm (in.)	428 (16-7/8)	428 (16-7/8)
	Weight		kg (lbs)	46 (101)	58 (128)
OUTDOOR UNIT	**Service Ref.**			**※7 PU-3JA type**	**※7 PU-4JSA type**
	External finish			Munsell 5Y 7/1	
	Refrigerant (R-22) control			Capillary tube	
	Compressor output		kW	2.2	2.7
	Protection devices			※6	
	Crankcase heater ※4	50/60Hz	W	32 / 38	32 / 38
	Fan motor output		kW	0.085	0.065 + 0.065
	Airflow	50Hz	m^3/min(CFM)	50 (1,765)	95 (3,352)
		60Hz	m^3/min(CFM)	50 (1,765)	95 (3,352)
	Noise level ※5	50/60Hz	dB	52 / 53	54 / 55
	Dimensions	W	mm (in.)	870 (34-1/4)	870 (34-1/4)
		D	mm (in.)	295 + 24 (11-5/8 add 1)	
		H	mm (in.)	850 (33-7/16)	1,258 (49-1/2)
	Weight		kg (lbs)	73 (161)	94 (207)

NOTE : ※1 Rating conditions (JIS B 8616)
Indoor : D.B. 27°C (80°F), W.B.19°C (86°F)
Outdoor : D.B. 35°C (95°F), W.B. 24°C (75°F)
NOTE : ※2 Rating conditions (SSA 385, 386)
Indoor : D.B. 29°C (84°F), W.B.19°C (86°F)
Outdoor : D.B. 46°C (115°F), W.B. 24°C (75°F)
NOTE : ※3 Total input based on indicated voltage.
(Indoor / Outdoor)

Service Ref.	PE-3EJA2.TH	PE-4EJSA2.TH
50Hz	1ph 220V / 1ph 220V	1ph 220V / 3ph 380V
60Hz	1ph 220V / 1ph 220V	1ph 220V / 3ph 220V

Rating conditions (JIS B 8616)
NOTE : ※4 Capacity of crankcase heater (W) based on 220 volts.
NOTE : ※5 Noise level is measured in an unacoustic room based on JIS conditions.
NOTE : ※6 V , N ⋯Inner thermostat, HP switch, LP switch
VL ⋯Inner thermostat, HP switch, LP switch, thermal switch.
T, Y⋯Thermal switch, Reversed - phase protector, HP switch, LP switch
NOTE : ※7 PU-3JA type⋯PU-3VJA1.TH, 3YJA1.TH, 3NJA1
PU-4JSA type⋯PU-4VLJSA1.TH, 4YJSA1.TH, 4TJSA2

Item \ Service Ref.				PE-5EJSA2.TH	PE-6EJSA2.TH
Cooling capacity ※1		50Hz	W	12,100	14,000
			Btu/h	41,300	47,800
		60Hz	W	13,500	15,200
			Btu/h	46,100	51,900
Cooling capacity ※2		60Hz	W	11,000	13,400
			Btu/h	37,500	45,700
Total input (50/60Hz) ※3			kW	5.10 / 6.06	5.65 / 6.58
INDOOR UNIT	**Service Ref.**			**PE-5EJSA2.TH**	**PE-6EJSA2.TH**
	External finish			Galvanized sheets	
	Fan motor output		kW	0.4	0.4
	Airflow Lo - High	50Hz	m^3/min	34 - 42	34 - 42
			CFM	1,200 - 1,482	1,200 - 1,482
		60Hz	m^3/min	34 - 42	34 - 42
			CFM	1,200 - 1,482	1,200 - 1,482
	Ex. static pressure at	50Hz	Pa (mmAq)	62 (6.35)	62 (6.35)
	Hi - notch	60Hz	Pa (mmAq)	62 (6.35)	62 (6.35)
	Operation control & thermostat			Remote controller & built-in	
	Noise level Low - High ※5	50Hz	dB	54 - 58	54 - 58
		60Hz	dB	54 - 58	54 - 58
	Unit drain thread		in.	R1	R1
	Dimensions	W	mm (in.)	1,255 (49-7/16)	1,255 (49-7/16)
		D	mm (in.)	690 (27-1/6)	690 (27-1/6)
		H	mm (in.)	428 (16-7/8)	428 (16-7/8)
	Weight		kg (lbs)	72 (159)	72 (159)
OUTDOOR UNIT	**Service Ref.**			**PU-5YJSA.TH, 5TJSA1**	**PU-6YJSA.TH, 6TJSA1**
	External finish			Munsell 5Y 7/1	
	Refrigerant (R-22) control			Capillary tube	
	Compressor output		kW	3.5	4.2/4.0
	Protection devices			※6	※6
	Crankcase heater	50/60Hz	W	–	–
	Fan motor output		kW	0.10 + 0.10	0.10 + 0.10
	Airflow	50Hz	m^3/min(CFM)	100(3,530)	100(3,530)
		60Hz	m^3/min(CFM)	100(3,530)	100(3,530)
	Noise level ※5	50/60Hz	dB	55 / 55	56/56
	Dimensions	W	mm (in.)	970 (38-3/16)	970 (38-3/16)
		D	mm (in.)	345 + 24 (13-9/16 add 1)	
		H	mm (in.)	1,258 (49-1/2)	1,258 (49-1/2)
	Weight		kg (lbs)	114 (282)	117 (313)

NOTE : ※1 Rating conditions (JIS B 8616)
Indoor : D.B. 27°C (80°F), W.B. 19°C (86°F)
Outdoor : D.B. 35°C (95°F), W.B. 24°C (75°F)
NOTE : ※2 Rating conditions (SSA 385, 386)
Indoor : D.B. 29°C (84°F), W.B. 19°C (86°F)
Outdoor : D.B. 46°C (115°F), W.B. 24°C (75°F)
NOTE : ※3 Total input based on indicated voltage.
(Indoor / Outdoor)

Service Ref.	PE-5/6EJSA2.TH
50Hz	1ph 220V / 3ph 380V
60Hz	1ph 220V / 3ph 220V

Rating conditions (JIS B 8616)
NOTE : ※4 Capacity of crankcase heater (W) based on 220 volts.
NOTE : ※5 Noise level is measured in an unacoustic room based on JIS conditions.
NOTE : ※6 Y : Inner thermostat, HP switch, Thermal switch
T : Inner thermostat, HP switch, LP switch, Thermal switch

Item \ Service Ref.				PE-3EJA 3.TH
Cooling capacity ※1		50Hz	W	7,500
			Btu/h	25,600
		60Hz	W	8,100
			Btu/h	27,600
Cooling capacity ※2		60Hz	W	6,700
			Btu/h	23,000
Total input (50/60Hz) ※3			kW	3.41 / 3.76
INDOOR UNIT	**Service Ref.**			**PE-3EJA 3.TH**
	External finish			Galvanized sheets
	Fan motor output		kW	0.2
	Airflow Lo - High	50Hz	m^3/min	19 - 22
			CFM	671 - 777
		60Hz	m^3/min	22 - 26
			CFM	777 - 918
	Ex. static pressure at Hi - notch	50Hz	Pa (mmAq)	49 (5)
		60Hz	Pa (mmAq)	69 (7)
	Operation control & thermostat			Remote controller & built-in
	Noise level Low - High ※5	50Hz	dB	46 - 48
		60Hz	dB	48 - 50
	Unit drain thread		in.	R1
	Dimensions	W	mm (in.)	785 (31)
		D	mm (in.)	690 (27-1/6)
		H	mm (in.)	428 (16-7/8)
	Weight		kg (lbs)	46 (101)
OUTDOOR UNIT	**Service Ref.**			**PU-3VJC.TH, 3YJC.TH, 3NJA1**
	External finish			Munsell 5Y 7/1
	Refrigerant (R-22) control			Capillary tube
	Compressor output		kW	(V)2.2, (Y)2.4 / (N)2.2
	Protection devices			※6
	Crankcase heater ※4	50/60Hz	W	32 / 38
	Fan motor output		kW	0.085
	Airflow	50Hz	m^3/min(CFM)	50 (1,765)
		60Hz	m^3/min(CFM)	50 (1,765)
	Noise level ※5	50/60Hz	dB	52 / 53
	Dimensions	W	mm (in.)	870 (34-1/4)
		D	mm (in.)	295 + 24 (11-5/8 add 1)
		H	mm (in.)	850 (33-7/16)
	Weight		kg (lbs)	73 (161)

NOTE : ※1 Rating conditions (JIS B 8616)
Indoor : D.B. 27°C (80°F), W.B. 19°C (86°F)
Outdoor : D.B. 35°C (95°F), W.B. 24°C (75°F)
NOTE : ※2 Rating conditions (SSA 385, 386)
Indoor : D.B. 29°C (84°F), W.B. 19°C (86°F)
Outdoor : D.B. 46°C (115°F), W.B. 24°C (75°F)
NOTE : ※3 Total input based on indicated voltage.
(Indoor / Outdoor)

Service Ref.	PE - 3EJA 3.TH
50Hz	1ph 220V / 1ph 220V, 3ph 380V
60Hz	1ph 220V / 1ph 220V

Rating conditions (JIS B 8616)
NOTE : ※4 Capacity of crankcase heater (W) based on 220 volts.
NOTE : ※5 Noise level is measured in an unacoustic room based on JIS conditions.
NOTE : ※6 V , N ···Inner thermostat, HP switch, LP switch
Y···Thermal switch, Reversed - phase protector, HP switch, LP switch

2. POWER SUPPLY & MODEL NAMES

Power supply		Service Ref.(Indoor unit)	Service Ref.(Outdoor unit)				
			PE - 3EJA 2.TH	**PE - 3EJA 3.TH**	**PE - 4EJSA 2.TH**	**PE - 5EJSA 2.TH**	**PE - 6EJSA 2.TH**
50Hz	1ph.	220, 230, 240V	PU-3VJA1.TH	PU-3VJC.TH	PU-4VLJSA1.TH	—	—
	3ph.	380/220, 400/230, 415/240V	PU-3YJA1.TH	PU-3YJC.TH	PU-4YJSA1.TH	PU-5YJSA.TH	PU-6YJSA.TH
60Hz	1ph.	220V	PU-3NJA1	PU-3NJA1	—	—	—
	3ph.	220V	—	—	PU-4TJSA2	PU-5TJSA1	PU-6TJSA1

NOTE : 1. Power supply key N ·····1ph, 220V, 60Hz
V (L) ···1ph, 220, 230, 240V, 50Hz Y ··· 3ph, 380 / 220, 400 / 230,
T ·····3ph, 220V, 60Hz 415 / 240V, 50Hz, 4wires
2. Primary power supplies for all indoor units are single - phase.

3. ELECTRICAL SPECIFICATIONS

Rating conditions ——— JIS B 8616 Indoor : D.B. 27°C (80°F), W.B. 19°C (66°F)
Outdoor : D.B. 35°C (95°F), W.B. 24°C (75°F)

Series PE Indoor Unit (Single Phase)

Power supply (1 phase)		V : 220V 50Hz		V : 230V 50Hz		V : 240V 50Hz		N : 220V 60Hz	
Service Ref.		**PE-3EJA2.TH PE-3EJA3.TH**	**PE-4EJSA2.TH**	**PE-3EJA2.TH PE-3EJA3.TH**	**PE-4EJSA2.TH**	**PE-3EJA2.TH PE-3EJA3.TH**	**PE-4EJSA2.TH**	**PE-3EJA2.TH PE-3EJA3.TH**	**PE-4EJSA2.TH**
Current	A	1.07	1.41	1.07	1.40	1.07	1.39	1.47	1.95
Input	kW	0.23	0.30	0.24	0.31	0.25	0.32	0.32	0.42
Starting current	A	2.4	2.6	2.5	2.6	2.6	2.6	2.1	2.6
Outdoor unit		PU-3	PU-4	PU-3	PU-4	PU-3	PU-4	PU-3	PU-4

Power supply (1 phase)		Y : 220V 50Hz		Y : 230V 50Hz		Y : 240V 50Hz		T : 220V 60Hz	
Service Ref.		**PE-5EJSA2.TH**	**PE-6EJSA2.TH**	**PE-5EJSA2.TH**	**PE-6EJSA2.TH**	**PE-5EJSA2.TH**	**PE-6EJSA2.TH**	**PE-5EJSA2.TH**	**PE-6EJSA2.TH**
Current	A	2.50	2.50	2.53	2.53	2.58	2.58	1.99	1.99
Input	kW	0.54	0.54	0.57	0.57	0.60	0.60	0.43	0.43
Starting current	A	4.1	4.1	4.1	4.1	4.1	4.1	3.1	3.1
Outdoor unit		PU-5	PU-6	PU-5	PU-6	PU-5	PU-6	PU-5	PU-6

5 DATA

1. PERFORMANCE DATA

Cooling capacity 50Hz

Service Ref.			PE-3EJA2.TH		PE-4EJSA2.TH	
Temperature			T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)
Outdoor D.B.	Indoor D.B.					
21°C (69.8°F)	16°C	(60.8°F)	7.2	0.81	9.8	0.81
	18°C	(64.4°F)	7.7	0.82	10.5	0.82
	19°C	(66.2°F)	7.9	0.83	10.8	0.83
	19.4°C	(67°F)	8.0	0.83	10.9	0.83
	20°C	(68°F)	8.2	0.84	11.1	0.84
	22°C	(71.6°F)	8.7	0.86	11.8	0.86
25°C (77°F)	16°C	(60.8°F)	7.1	0.84	9.6	0.84
	18°C	(64.4°F)	7.5	0.85	10.2	0.85
	19°C	(66.2°F)	7.8	0.86	10.6	0.86
	19.4°C	(67°F)	7.9	0.86	10.7	0.86
	20°C	(68°F)	8.0	0.87	10.9	0.87
	22°C	(71.6°F)	8.5	0.89	11.6	0.89
30°C (86°F)	16°C	(60.8°F)	6.8	0.90	9.3	0.90
	18°C	(64.4°F)	7.3	0.92	9.9	0.92
	19°C	(66.2°F)	7.5	0.93	10.2	0.93
	19.4°C	(67°F)	7.6	0.93	10.3	0.93
	20°C	(68°F)	7.7	0.94	10.5	0.94
	22°C	(71.6°F)	8.2	0.96	11.2	0.96
32.2°C (90°F)	16°C	(60.8°F)	6.7	0.93	9.1	0.93
	18°C	(64.4°F)	7.1	0.95	9.7	0.95
	19°C	(66.2°F)	7.4	0.96	10.0	0.96
	19.4°C	(67°F)	7.5	0.97	10.2	0.97
	20°C	(68°F)	7.6	0.97	10.3	0.97
	22°C	(71.6°F)	8.1	0.99	11.0	0.99
35°C (95°F)	16°C	(60.8°F)	6.5	0.96	8.9	0.96
	18°C	(64.4°F)	7.0	0.99	9.5	0.99
	19°C	**(66.2°F)**	**7.2**	**1.00**	**9.8**	**1.00**
	19.4°C	(67°F)	7.3	1.00	10.1	1.00
	20°C	(68°F)	7.4	1.01	10.1	1.01
	22°C	(71.6°F)	7.9	1.04	10.8	1.04
40°C (104°F)	16°C	(60.8°F)	6.2	1.03	8.5	1.03
	18°C	(64.4°F)	6.7	1.06	9.1	1.06
	19°C	(66.2°F)	6.9	1.07	9.4	1.07
	19.4°C	(67°F)	7.0	1.08	9.5	1.08
	20°C	(68°F)	7.1	1.08	9.7	1.08
	22°C	(71.6°F)	7.6	1.11	10.3	1.11
40.6°C (105°F)	16°C	(60.8°F)	6.2	1.04	8.4	1.04
	18°C	(64.4°F)	6.6	1.06	9.0	1.06
	19°C	(66.2°F)	6.9	1.08	9.3	1.08
	19.4°C	(67°F)	6.9	1.08	9.5	1.08
	20°C	(68°F)	7.1	1.09	9.6	1.09
	22°C	(71.6°F)	7.6	1.12	10.3	1.12
45°C (113°F)	16°C	(60.8°F)	5.9	1.10	8.1	1.10
	18°C	(64.4°F)	6.4	1.12	8.6	1.12
	19°C	(66.2°F)	6.6	1.14	8.9	1.14
	19.4°C	(67°F)	6.7	1.15	9.1	1.15
	20°C	(68°F)	6.8	1.16	9.3	1.16
	22°C	(71.6°F)	7.3	1.20	9.9	1.20
46°C (115°F)	16°C	(60.8°F)	5.9	1.11	8.0	1.11
	18°C	(64.4°F)	6.3	1.14	8.6	1.14
	19°C	(66.2°F)	6.5	1.15	8.9	1.15
	19.4°C	(67°F)	6.6	1.16	9.0	1.16
	20°C	(68°F)	6.7	1.17	9.2	1.17
	22°C	(71.6°F)	7.2	1.21	9.8	1.21
50°C (122°F)	16°C	(60.8°F)	5.6	1.16	7.6	1.16
	18°C	(64.4°F)	6.0	1.19	8.2	1.19
	19°C	(66.2°F)	6.2	1.21	8.5	1.21
	19.4°C	(67°F)	6.3	1.22	8.6	1.22
	20°C	(68°F)	6.5	1.23	8.8	1.23
	22°C	(71.6°F)	6.9	1.28	9.4	1.28
52°C (125.5°F)	16°C	(60.8°F)	5.5	1.19	7.4	1.19
	18°C	(64.4°F)	5.9	1.22	8.0	1.22
	19°C	(66.2°F)	6.1	1.24	8.3	1.24
	19.4°C	(67°F)	6.2	1.25	8.4	1.25
	20°C	(68°F)	6.3	1.26	8.6	1.26
	22°C	(71.6°F)	6.8	1.31	9.2	1.31
Evaporator airflow (m^3/min)			22		34	
Bypass factors			0.26		0.21	
S.H.F. at rating conditions			0.69		0.76	

Notes :
1. T.C : Total capacity (× 10^3 W) ··· (Btu / h) ≒ (W) × 3.4, (kcal / h) = (W) × 0.86
   C.F (T.I.) : Correction factors of Total input (Indoor unit input + Outdoor unit input)
2. (°F) = 32 + 9 / 5 (°C)
3. Guaranteed operating range (cooling)
   Lower limit ... Indoor : D.B. 21°C (70°F), W.B. 15.5°C (60°F), Outdoor : D.B. 21°C (70°F)
   Upper limit ··· Indoor : D.B. 35°C (95°F), W.B. 22.5°C (72.5°F), Outdoor : D.B. 52°C (125.5°F)

※VL ··· Outdoor : D.B. 46°C (115°F)

Cooling capacity 50Hz

Service Ref.		PE-3EJA3.TH	
Temperature		T.C.	C.F. (T.I.)
Outdoor D.B.	Indoor D.B.		
21°C (69.8°F)	16°C (60.8°F)	7.5	0.81
	18°C (64.4°F)	8.0	0.82
	19°C (66.2°F)	8.3	0.83
	19.4°C (67°F)	8.4	0.83
	20°C (68°F)	8.5	0.84
	22°C (71.6°F)	9.0	0.86
25°C (77°F)	16°C (60.8°F)	7.4	0.84
	18°C (64.4°F)	7.8	0.85
	19°C (66.2°F)	8.1	0.86
	19.4°C (67°F)	8.2	0.86
	20°C (68°F)	8.4	0.87
	22°C (71.6°F)	8.9	0.89
30°C (86°F)	16°C (60.8°F)	7.1	0.90
	18°C (64.4°F)	7.6	0.92
	19°C (66.2°F)	7.8	0.93
	19.4°C (67°F)	7.9	0.93
	20°C (68°F)	8.1	0.94
	22°C (71.6°F)	8.6	0.96
32.2°C (90°F)	16°C (60.8°F)	7.0	0.93
	18°C (64.4°F)	7.4	0.95
	19°C (66.2°F)	7.7	0.96
	19.4°C (67°F)	7.8	0.97
	20°C (68°F)	7.9	0.97
	22°C (71.6°F)	8.4	0.99
35°C (95°F)	16°C (60.8°F)	6.8	0.96
	18°C (64.4°F)	7.3	0.99
	19°C (66.2°F)	**7.5**	**1.00**
	19.4°C (67°F)	7.6	1.00
	20°C (68°F)	7.7	1.01
	22°C (71.6°F)	8.3	1.04
40°C (104°F)	16°C (60.8°F)	6.5	1.03
	18°C (64.4°F)	6.9	1.06
	19°C (66.2°F)	7.2	1.07
	19.4°C (67°F)	7.3	1.08
	20°C (68°F)	7.4	1.08
	22°C (71.6°F)	7.9	1.11
40.6°C (105°F)	16°C (60.8°F)	6.5	1.04
	18°C (64.4°F)	6.9	1.06
	19°C (66.2°F)	7.1	1.08
	19.4°C (67°F)	7.2	1.08
	20°C (68°F)	7.4	1.09
	22°C (71.6°F)	7.9	1.12
45°C (113°F)	16°C (60.8°F)	6.2	1.10
	18°C (64.4°F)	6.6	1.12
	19°C (66.2°F)	6.8	1.14
	19.4°C (67°F)	6.9	1.15
	20°C (68°F)	7.1	1.16
	22°C (71.6°F)	7.6	1.20
46°C (115°F)	16°C (60.8°F)	6.1	1.11
	18°C (64.4°F)	6.5	1.14
	19°C (66.2°F)	6.8	1.15
	19.4°C (67°F)	6.9	1.16
	20°C (68°F)	7.0	1.17
	22°C (71.6°F)	7.5	1.21
50°C (122°F)	16°C (60.8°F)	5.8	1.16
	18°C (64.4°F)	6.3	1.19
	19°C (66.2°F)	6.5	1.21
	19.4°C (67°F)	6.6	1.22
	20°C (68°F)	6.7	1.23
	22°C (71.6°F)	7.2	1.28
52°C (125.5°F)	16°C (60.8°F)	5.7	1.19
	18°C (64.4°F)	6.1	1.22
	19°C (66.2°F)	6.4	1.24
	19.4°C (67°F)	6.5	1.25
	20°C (68°F)	6.6	1.26
	22°C (71.6°F)	7.1	1.31
Evaporator airflow (m^3/min)		22	
Bypass factors		0.26	
S.H.F. at rating conditions		0.72	

Notes :
1. T.C : Total capacity (× 10^3 W) ··· (Btu / h) ≒ (W) × 3.4, (kcal / h) = (W) × 0.86
   C.F (T.I.) : Correction factors of Total input (Indoor unit input + Outdoor unit input)
2. (°F) = 32 + 9 / 5 (°C)
3. Guaranteed operating range (cooling)
   - Lower limit ... Indoor : D.B. 21°C (70°F), W.B. 15.5°C (60°F), Outdoor : D.B. 21°C (70°F)
   - Upper limit ··· Indoor : D.B. 35°C (95°F), W.B. 22.5°C (72.5°F), Outdoor : D.B. 52°C (125.5°F)

Cooling capacity 50Hz

Service Ref.		PE-5EJSA2.TH		PE-6EJSA2.TH	
Temperature		T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)
Outdoor D.B.	Indoor D.B.				
21°C (69.8°F)	16°C (60.8°F)	12.1	0.81	14.1	0.81
	18°C (64.4°F)	12.9	0.82	15.0	0.82
	19°C (66.2°F)	13.3	0.83	15.4	0.83
	19.4°C (67°F)	13.5	0.83	15.6	0.83
	20°C (68°F)	13.7	0.84	15.9	0.84
	22°C (71.6°F)	14.6	0.86	16.8	0.86
25°C (77°F)	16°C (60.8°F)	11.9	0.84	13.7	0.84
	18°C (64.4°F)	12.7	0.85	14.6	0.85
	19°C (66.2°F)	13.1	0.86	15.1	0.86
	19.4°C (67°F)	13.2	0.86	15.3	0.86
	20°C (68°F)	13.5	0.87	15.6	0.87
	22°C (71.6°F)	14.3	0.89	16.6	0.89
30°C (86°F)	16°C (60.8°F)	11.4	0.90	13.2	0.90
	18°C (64.4°F)	12.2	0.92	14.1	0.92
	19°C (66.2°F)	12.6	0.93	14.6	0.93
	19.4°C (67°F)	12.8	0.93	14.8	0.93
	20°C (68°F)	13.0	0.94	15.0	0.94
	22°C (71.6°F)	13.8	0.96	16.0	0.96
32.2°C (90°F)	16°C (60.8°F)	11.2	0.93	13.0	0.93
	18°C (64.4°F)	12.0	0.95	13.9	0.95
	19°C (66.2°F)	12.4	0.96	14.3	0.96
	19.4°C (67°F)	12.5	0.97	14.5	0.97
	20°C (68°F)	12.8	0.97	14.8	0.97
	22°C (71.6°F)	13.6	0.99	15.7	0.99
35°C (95°F)	16°C (60.8°F)	11.0	0.96	12.7	0.96
	18°C (64.4°F)	11.7	0.99	13.5	0.99
	19°C (66.2°F)	**12.1**	**1.00**	**14.0**	**1.00**
	19.4°C (67°F)	12.3	1.00	14.2	1.00
	20°C (68°F)	12.5	1.01	14.5	1.01
	22°C (71.6°F)	13.3	1.04	15.4	1.04
40°C (104°F)	16°C (60.8°F)	10.5	1.03	12.1	1.03
	18°C (64.4°F)	11.2	1.06	13.0	1.06
	19°C (66.2°F)	11.6	1.07	13.4	1.07
	19.4°C (67°F)	11.7	1.08	13.6	1.08
	20°C (68°F)	12.0	1.08	13.8	1.08
	22°C (71.6°F)	12.8	1.11	14.8	1.11
40.6°C (105°F)	16°C (60.8°F)	10.4	1.04	12.1	1.04
	18°C (64.4°F)	11.1	1.06	12.9	1.06
	19°C (66.2°F)	11.5	1.08	13.3	1.08
	19.4°C (67°F)	11.7	1.08	13.5	1.08
	20°C (68°F)	11.9	1.09	13.8	1.09
	22°C (71.6°F)	12.7	1.12	14.7	1.12
45°C (113°F)	16°C (60.8°F)	10.0	1.10	11.5	1.10
	18°C (64.4°F)	10.7	1.12	12.4	1.12
	19°C (66.2°F)	11.0	1.14	12.8	1.14
	19.4°C (67°F)	11.2	1.15	13.0	1.15
	20°C (68°F)	11.4	1.16	13.2	1.16
	22°C (71.6°F)	12.2	1.20	14.1	1.20
46°C (115°F)	16°C (60.8°F)	9.9	1.11	11.4	1.11
	18°C (64.4°F)	10.6	1.14	12.2	1.14
	19°C (66.2°F)	10.9	1.15	12.6	1.15
	19.4°C (67°F)	11.0	1.16	12.7	1.16
	20°C (68°F)	11.2	1.17	13.0	1.17
	22°C (71.6°F)	12.1	1.21	14.0	1.21
50°C (122°F)	16°C (60.8°F)	8.9	1.16	10.3	1.16
	18°C (64.4°F)	9.6	1.19	11.1	1.19
	19°C (66.2°F)	9.9	1.21	11.5	1.21
	19.4°C (67°F)	10.0	1.22	11.6	1.22
	20°C (68°F)	10.3	1.23	11.9	1.23
	22°C (71.6°F)	10.6	1.28	12.3	1.28
52°C (125.5°F)	16°C (60.8°F)	7.9	1.19	9.1	1.19
	18°C (64.4°F)	8.5	1.22	9.8	1.22
	19°C (66.2°F)	8.8	1.24	10.2	1.24
	19.4°C (67°F)	8.9	1.25	10.3	1.25
	20°C (68°F)	9.1	1.26	10.5	1.26
	22°C (71.6°F)	9.4	1.31	10.9	1.31
Evaporator airflow (m³/min)		42		42	
Bypass factors		0.18		0.16	
S.H.F. at rating conditions		0.82		0.77	

Notes : 1. T.C : Total capacity (× 10^3 W) ··· (Btu / h) ≒ (W) × 3.4, (kcal / h) = (W) × 0.86
C.F (T.I.) : Correction factors of Total input (Indoor unit input + Outdoor unit input)

2. (°F) = 32 + 9 / 5 (°C)

3. Guaranteed operating range (cooling) { Lower limit ... Indoor : D.B. 21°C (70°F), W.B. 15.5°C (60°F), Outdoor : D.B. 21°C (70°F)
Upper limit ··· Indoor : D.B. 35°C (95°F), W.B. 22.5°C (72.5°F), Outdoor : D.B. 52°C (125.5°F)

※VL ··· Outdoor : D.B. 46°C (115°F)

Cooling capacity 60Hz

Service Ref.			PE-3EJA2.TH, PE-3EJA3.TH		PE-4EJSA2.TH	
Temperature			T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)
Outdoor D.B.	Indoor D.B.					
21°C (69.8°F)	16°C	(60.8°F)	8.1	0.81	10.9	0.81
	18°C	(64.4°F)	8.7	0.82	11.7	0.82
	19°C	(66.2°F)	8.9	0.83	12.0	0.83
	19.4°C	(67°F)	9.0	0.83	12.2	0.83
	20°C	(68°F)	9.2	0.84	12.4	0.84
	22°C	(71.6°F)	9.7	0.86	13.1	0.86
25°C (77°F)	16°C	(60.8°F)	7.9	0.84	10.7	0.84
	18°C	(64.4°F)	8.5	0.85	11.4	0.85
	19°C	(66.2°F)	8.7	0.86	11.8	0.86
	19.4°C	(67°F)	8.9	0.86	11.9	0.86
	20°C	(68°F)	9.0	0.87	12.1	0.87
	22°C	(71.6°F)	9.6	0.89	12.9	0.89
30°C (86°F)	16°C	(60.8°F)	7.7	0.90	10.3	0.90
	18°C	(64.4°F)	8.2	0.92	11.0	0.92
	19°C	(66.2°F)	8.4	0.93	11.3	0.93
	19.4°C	(67°F)	8.5	0.93	11.5	0.93
	20°C	(68°F)	8.7	0.94	11.7	0.94
	22°C	(71.6°F)	9.3	0.96	12.5	0.96
32.2°C (90°F)	16°C	(60.8°F)	7.5	0.93	10.1	0.95
	18°C	(64.4°F)	8.0	0.95	10.8	0.96
	19°C	(66.2°F)	8.3	0.96	11.2	0.97
	19.4°C	(67°F)	8.4	0.97	11.3	0.97
	20°C	(68°F)	8.6	0.97	11.5	1.00
	22°C	(71.6°F)	9.1	0.99	12.3	0.99
35°C (95°F)	16°C	(60.8°F)	7.3	0.96	9.9	0.96
	18°C	(64.4°F)	7.8	0.99	10.5	0.99
	19°C	**(66.2°F)**	**8.1**	**1.00**	**10.9**	**1.00**
	19.4°C	(67°F)	8.2	1.00	11.0	1.00
	20°C	(68°F)	8.4	1.01	11.3	1.01
	22°C	(71.6°F)	8.9	1.04	12.0	1.04
40°C (104°F)	16°C	(60.8°F)	7.0	1.03	9.4	1.03
	18°C	(64.4°F)	7.5	1.06	10.1	1.06
	19°C	(66.2°F)	7.8	1.07	10.4	1.07
	19.4°C	(67°F)	7.9	1.08	10.6	1.08
	20°C	(68°F)	8.0	1.08	10.8	1.08
	22°C	(71.6°F)	8.5	1.11	11.5	1.11
40.6°C (105°F)	16°C	(60.8°F)	7.0	1.04	9.4	1.04
	18°C	(64.4°F)	7.5	1.06	10.0	1.06
	19°C	(66.2°F)	7.8	1.08	10.4	1.08
	19.4°C	(67°F)	7.9	1.08	10.5	1.08
	20°C	(68°F)	8.0	1.09	10.7	1.09
	22°C	(71.6°F)	8.5	1.12	11.4	1.12
45°C (113°F)	16°C	(60.8°F)	6.7	1.10	9.0	1.10
	18°C	(64.4°F)	7.5	1.12	9.6	1.12
	19°C	(66.2°F)	7.4	1.14	10.0	1.14
	19.4°C	(67°F)	7.5	1.15	10.1	1.15
	20°C	(68°F)	8.0	1.16	10.3	1.16
	22°C	(71.6°F)	8.2	1.20	11.0	1.20
46°C (115°F)	16°C	(60.8°F)	6.6	1.11	8.9	1.11
	18°C	(64.4°F)	7.1	1.14	9.5	1.14
	19°C	(66.2°F)	7.3	1.15	9.9	1.15
	19.4°C	(67°F)	7.4	1.16	10.0	1.16
	20°C	(68°F)	7.6	1.17	10.2	1.17
	22°C	(71.6°F)	8.1	1.21	10.9	1.21
50°C (122°F)	16°C	(60.8°F)	6.3	1.16	8.5	1.16
	18°C	(64.4°F)	6.8	1.19	9.1	1.19
	19°C	(66.2°F)	7.0	1.21	9.5	1.21
	19.4°C	(67°F)	7.1	1.22	9.6	1.22
	20°C	(68°F)	7.3	1.23	9.8	1.23
	22°C	(71.6°F)	7.8	1.28	10.5	1.28
52°C (125.5°F)	16°C	(60.8°F)	6.2	1.19	8.3	1.19
	18°C	(64.4°F)	6.6	1.22	8.9	1.22
	19°C	(66.2°F)	6.9	1.24	9.2	1.24
	19.4°C	(67°F)	7.0	1.25	9.4	1.25
	20°C	(68°F)	7.1	1.26	9.6	1.26
	22°C	(71.6°F)	7.6	1.31	10.3	1.31
Evaporator airflow (m^3/min)			26		34	
Bypass factors			0.35		0.23	
S.H.F. at rating conditions			0.67		0.74	

Notes : 1. T.C : Total capacity (× 10^3 W) ··· (Btu / h) ≒ (W) × 3.4, (kcal / h) = (W) × 0.86
C.F (T.I) : Correction factors of Total input (Indoor unit input + Outdoor unit input)

2. (°F) = 32 + 9 / 5 (°C)

3. Guaranteed operating range (cooling) { Lower limit ... Indoor : D.B. 21°C (70°F), W.B. 15.5°C (60°F), Outdoor : D.B. 21°C (70°F)
Upper limit ··· Indoor : D.B. 35°C (95°F), W.B. 22.5°C (72.5°F), Outdoor : D.B. 52°C (125.5°F)

Cooling capacity 60Hz

Service Ref.			PE-5EJSA2.TH		PE-6EJSA2.TH	
Temperature			T.C.	C.F. (T.I.)	T.C.	C.F. (T.I.)
Outdoor D.B.	Indoor D.B.					
21°C (69.8°F)	16°C	(60.8°F)	13.6	0.81	15.3	0.81
	18°C	(64.4°F)	14.4	0.82	16.2	0.82
	19°C	(66.2°F)	14.9	0.83	16.8	0.83
	19.4°C	(67°F)	15.1	0.83	17.0	0.83
	20°C	(68°F)	15.3	0.84	17.3	0.84
	22°C	(71.6°F)	16.2	0.86	18.3	0.86
25°C (77°F)	16°C	(60.8°F)	13.2	0.84	14.9	0.84
	18°C	(64.4°F)	14.1	0.85	15.9	0.85
	19°C	(66.2°F)	14.6	0.86	16.4	0.86
	19.4°C	(67°F)	14.8	0.86	16.6	0.86
	20°C	(68°F)	15.0	0.87	16.9	0.87
	22°C	(71.6°F)	16.0	0.89	18.0	0.89
30°C (86°F)	16°C	(60.8°F)	12.8	0.90	14.4	0.90
	18°C	(64.4°F)	13.6	0.92	15.3	0.92
	19°C	(66.2°F)	14.0	0.93	15.8	0.93
	19.4°C	(67°F)	14.2	0.93	16.0	0.93
	20°C	(68°F)	14.5	0.94	16.3	0.94
	22°C	(71.6°F)	15.4	0.96	17.4	0.96
32.2°C (90°F)	16°C	(60.8°F)	12.5	0.93	14.1	0.93
	18°C	(64.4°F)	13.4	0.95	15.1	0.95
	19°C	(66.2°F)	13.8	0.96	15.5	0.96
	19.4°C	(67°F)	14.0	0.97	15.7	0.97
	20°C	(68°F)	14.3	0.97	16.0	0.97
	22°C	(71.6°F)	15.2	0.99	17.1	0.99
35°C (95°F)	16°C	(60.8°F)	12.2	0.96	13.8	0.96
	18°C	(64.4°F)	13.1	0.99	14.7	0.99
	19°C	**(66.2°F)**	**13.5**	**1.00**	**15.2**	**1.00**
	19.4°C	(67°F)	13.7	1.00	15.4	1.00
	20°C	(68°F)	13.9	1.01	15.7	1.01
	22°C	(71.6°F)	14.9	1.04	16.7	1.04
40°C (104°F)	16°C	(60.8°F)	11.7	1.03	13.2	1.03
	18°C	(64.4°F)	12.5	1.06	14.1	1.06
	19°C	(66.2°F)	12.9	1.07	14.6	1.07
	19.4°C	(67°F)	13.1	1.08	14.7	1.08
	20°C	(68°F)	13.4	1.08	15.0	1.08
	22°C	(71.6°F)	14.3	1.11	16.0	1.11
40.6°C (105°F)	16°C	(60.8°F)	11.6	1.04	13.1	1.04
	18°C	(64.4°F)	12.4	1.06	14.0	1.06
	19°C	(66.2°F)	12.9	1.08	14.5	1.08
	19.4°C	(67°F)	13.0	1.08	14.7	1.08
	20°C	(68°F)	13.3	1.09	15.0	1.09
	22°C	(71.6°F)	14.2	1.12	16.0	1.12
45°C (113°F)	16°C	(60.8°F)	11.1	1.10	12.5	1.10
	18°C	(64.4°F)	11.9	1.12	13.4	1.12
	19°C	(66.2°F)	12.3	1.14	13.9	1.14
	19.4°C	(67°F)	12.5	1.15	14.1	1.15
	20°C	(68°F)	12.7	1.16	14.4	1.16
	22°C	(71.6°F)	13.6	1.20	15.3	1.20
46°C (115°F)	16°C	(60.8°F)	11.0	1.11	12.4	1.11
	18°C	(64.4°F)	11.8	1.14	13.3	1.14
	19°C	(66.2°F)	12.1	1.15	13.7	1.15
	19.4°C	(67°F)	12.3	1.16	13.8	1.16
	20°C	(68°F)	12.5	1.17	14.1	1.17
	22°C	(71.6°F)	13.5	1.21	15.2	1.21
50°C (122°F)	16°C	(60.8°F)	9.9	1.16	11.2	1.16
	18°C	(64.4°F)	10.7	1.19	12.0	1.19
	19°C	(66.2°F)	11.1	1.21	12.4	1.21
	19.4°C	(67°F)	11.2	1.22	12.6	1.22
	20°C	(68°F)	11.4	1.23	12.9	1.23
	22°C	(71.6°F)	11.8	1.28	13.3	1.28
52°C (125.5°F)	16°C	(60.8°F)	8.8	1.19	9.9	1.19
	18°C	(64.4°F)	9.4	1.22	10.6	1.22
	19°C	(66.2°F)	9.8	1.24	11.0	1.24
	19.4°C	(67°F)	9.9	1.25	11.2	1.25
	20°C	(68°F)	10.1	1.26	11.4	1.26
	22°C	(71.6°F)	10.5	1.31	11.8	1.31
Evaporator airflow (m^3/min)			42		42	
Bypass factors			0.19		0.19	
S.H.F. at rating conditions			0.77		0.73	

Notes :
1. T.C : Total capacity (× 10^3 W) ··· (Btu / h) ≒ (W) × 3.4, (kcal / h) = (W) × 0.86
   C.F (T.I) : Correction factors of Total input (Indoor unit input + Outdoor unit input)
2. (°F) = 32 + 9 / 5 (°C)
3. Guaranteed operating range (cooling) { Lower limit ... Indoor : D.B. 21°C (70°F), W.B. 15.5°C (60°F), Outdoor : D.B. 21°C (70°F)
   Upper limit ··· Indoor : D.B. 35°C (95°F), W.B. 22.5°C (72.5°F), Outdoor : D.B. 52°C (125.5°F)

Cooling capacity correction factors 50Hz

Service Ref.	Refrigerant piping length (one way)									
	5m (16ft)	10m (33ft)	15m (49ft)	20m (66ft)	25m (82ft)	30m (98ft)	35m (115ft)	40m (131ft)	45m (148ft)	50m (164ft)
PE-3EJA2.TH **PE-3EJA3.TH**	1.0	0.978	0.962	0.948	0.934	0.921	—	—	—	—
PE-4EJSA2.TH	1.0	0.984	0.974	0.964	0.954	0.944	0.935	0.926	—	—
PE-5EJSA2.TH	1.0	0.978	0.962	0.948	0.934	0.921	0.908	0.896	0.884	0.875
PE-6EJSA2.TH	1.0	0.971	0.950	0.931	0.912	0.896	0.880	0.864	0.850	0.840

Cooling capacity correction factors 60Hz

Service Ref.	Refrigerant piping length (one way)									
	5m (16ft)	10m (33ft)	15m (49ft)	20m (66ft)	25m (82ft)	30m (98ft)	35m (115ft)	40m (131ft)	45m (148ft)	50m (164ft)
PE-3EJA2.TH **PE-3EJA3.TH**	1.0	0.971	0.950	0.931	0.913	0.896	—	—	—	—
PE-4EJSA2.TH	1.0	0.980	0.966	0.952	0.939	0.926	0.914	0.902	—	—
PE-5EJSA2.TH	1.0	0.971	0.950	0.931	0.913	0.896	0.880	0.864	0.850	0.840
PE-6EJSA2.TH	1.0	0.960	0.933	0.908	0.885	0.894	0.845	0.828	0.812	0.800

2. STANDARD OPERATION DATA

Service Ref.				PE-3EJA 2.TH		PE-4EJSA 2.TH	
Mode				Cooling	Cooling	Cooling	Cooling
Total	Capacity		W	7,200	8,100	9,800	10,900
	Input		kW	3.41	3.76	3.59	4.69
Electrical Circuit	**Indoor unit Service Ref.**			**PE-3EJA 2.TH**		**PE-4EJSA 2.TH**	
	Phase, Hz			1, 50	1, 60	1, 50	1, 60
	Volts		V	220	220	220	220
	Amperes		A	1.07	1.41	1.41	1.95
	Outdoor unit Service Ref.			**PU-3VJA1.TH**	**PU-3NJA1**	**PU-4YJSA1.TH**	**PU-4TJSA2**
	Phase, Hz			1, 50	1, 60	3, 50	3, 60
	Volts		V	220	220	380	220
	Amperes		A	15.1	17.6	5.7	12.2
Refrigerant Circuit	Discharge pressure		MPa (kgf/㎠)	2.04 (20.8)	2.20 (22.4)	1.91 (19.5)	2.14 (21.8)
	Suction pressure		MPa (kgf/㎠)	0.465 (4.7)	0.44 (4.5)	0.54 (5.5)	0.51 (5.2)
	Discharge temperature		℃	64.1	73.2	77.4	77.5
	Condensing temperature		℃	52.4	54.2	50.3	54.9
	Suction temperature		℃	4.5	1.3	9.2	6.7
	Ref. pipe length		m	5	5	5	5
Indoor side	Intake air temperature	D.B.	℃	27	27	27	27
		W.B.	℃	19	19	19	19
	Discharge air temperature	D.B.	℃	13.1	14.2	14.6	15.3
Outdoor side	Intake air temperature	D.B.	℃	35	35	35	35
		W.B.	℃	24	24	24	24

The unit of pressure has been changed to Mpa based on SI (International System of Units) in accordance with I.S.O. (International Organization for Standardization).

The conversion factor is : 1(Mpa) =10.2 (kgf/㎠)

Service Ref.				PE-5EJSA 2.TH		PE-6EJSA 2.TH	
Mode				Cooling	Cooling	Cooling	Cooling
Total	Capacity		W	12,100	13,500	14,000	15,200
	Input		kW	5.10	6.06	5.65	6.58
Electrical Circuit	**Indoor unit Service Ref.**			**PE-5EJSA2.TH**		**PE-6EJSA2.TH**	
	Phase, Hz			1, 50	1, 60	1, 50	1, 60
	Volts		V	220	220	220	220
	Amperes		A	2.50	1.99	2.50	1.99
	Outdoor unit Service Ref.			**PU-5YJSA.TH**	**PU-5TJSA1**	**PU-6YJSA.TH**	**PU-6TJSA1**
	Phase, Hz			3, 50	3, 60	3, 50	3, 60
	Volts		V	380	220	380	220
	Amperes		A	8.15	16.83	8.63	18.70
Refrigerant Circuit	Discharge pressure		MPa (kgf/㎠)	1.86 (19.0)	1.98 (20.2)	1.95 (19.9)	2.01 (20.5)
	Suction pressure		MPa (kgf/㎠)	0.48 (4.9)	0.43 (4.4)	0.44 (4.5)	0.40 (4.1)
	Discharge temperature		℃	72.2	78.3	77.8	81
	Condensing temperature		℃	49.3	51.9	50.8	52.1
	Suction temperature		℃	- 0.9	1.6	1.7	- 0.5
	Ref. pipe length		m	5	5	5	5
Indoor side	Intake air temperature	D.B.	℃	27	27	27	27
		W.B.	℃	19	19	19	19
	Discharge air temperature	D.B.	℃	15.5	14.9	14.5	14.1
Outdoor side	Intake air temperature	D.B.	℃	35	35	35	35
		W.B.	℃	24	24	24	24

The unit of pressure has been changed to Mpa based on SI (International System of Units) in accordance with I.S.O. (International Organization for Standardization).

The conversion factor is : 1(Mpa) =10.2 (kgf/㎠)

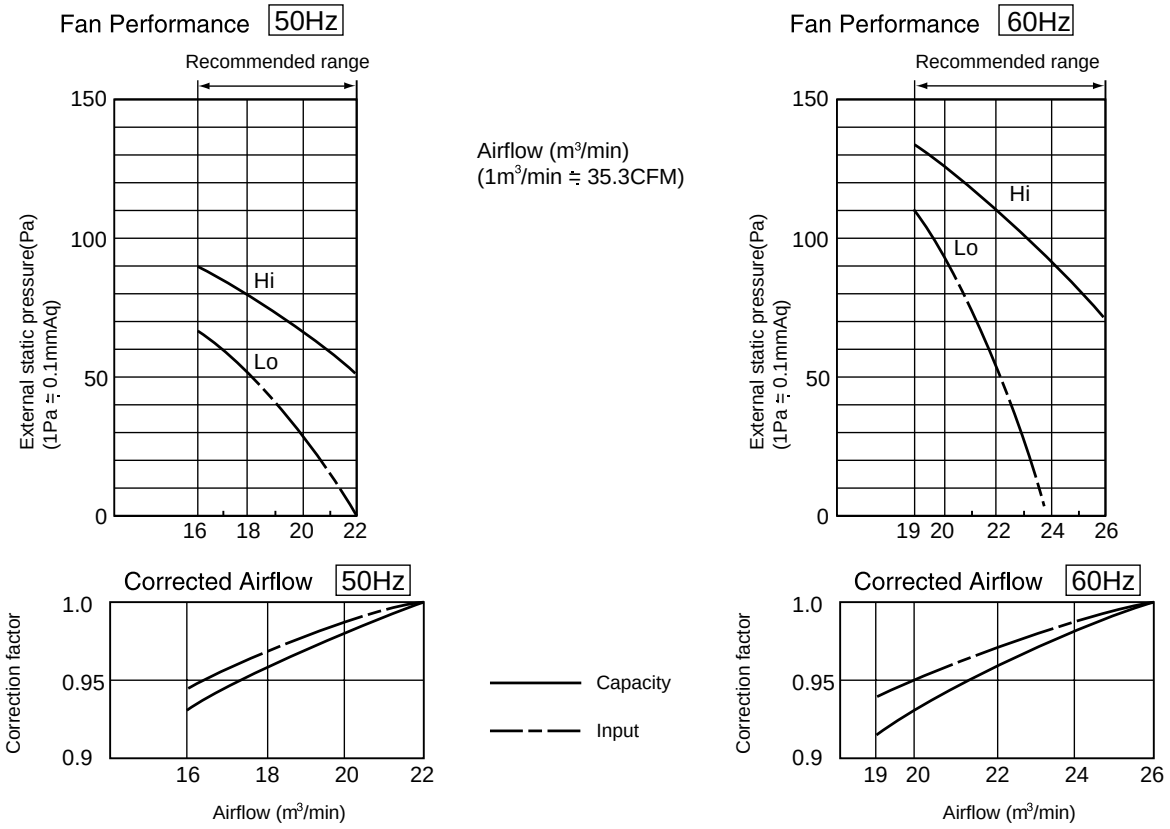
Service Ref.				PE-3EJA 3.TH	
Mode				Cooling	Cooling
Total	Capacity		W	7,500	8,100
	Input		kW	3.41	3.76
Electrical Circuit	**Indoor unit Service Ref.**			**PE-3EJA 3.TH**	
	Phase, Hz			1, 50	1, 60
	Volts		V	220	220
	Amperes		A	1.07	1.41
	Outdoor unit Service Ref.			**PU-3VJC.TH**	**PU-3NJA1**
	Phase, Hz			1, 50	1, 60
	Volts		V	220	220
	Amperes		A	15.1	17.6
Refrigerant Circuit	Discharge pressure		MPa (kgf/cm²)	2.04 (20.8)	2.20 (22.4)
	Suction pressure		MPa (kgf/cm²)	0.46 (4.7)	0.44 (4.5)
	Discharge temperature		℃	88.1	73.2
	Condensing temperature		℃	52.4	54.2
	Suction temperature		℃	4.5	1.3
	Ref. pipe length		m	5	5
Indoor side	Intake air temperature	D.B.	℃	27	27
		W.B.	℃	19	19
	Discharge air temperature	D.B.	℃	15.0	14.2
Outdoor side	Intake air temperature	D.B.	℃	35	35
		W.B.	℃	24	24

The unit of pressure has been changed to Mpa based on SI (International System of Units) in accordance with I.S.O. (International Organization for Standardization).

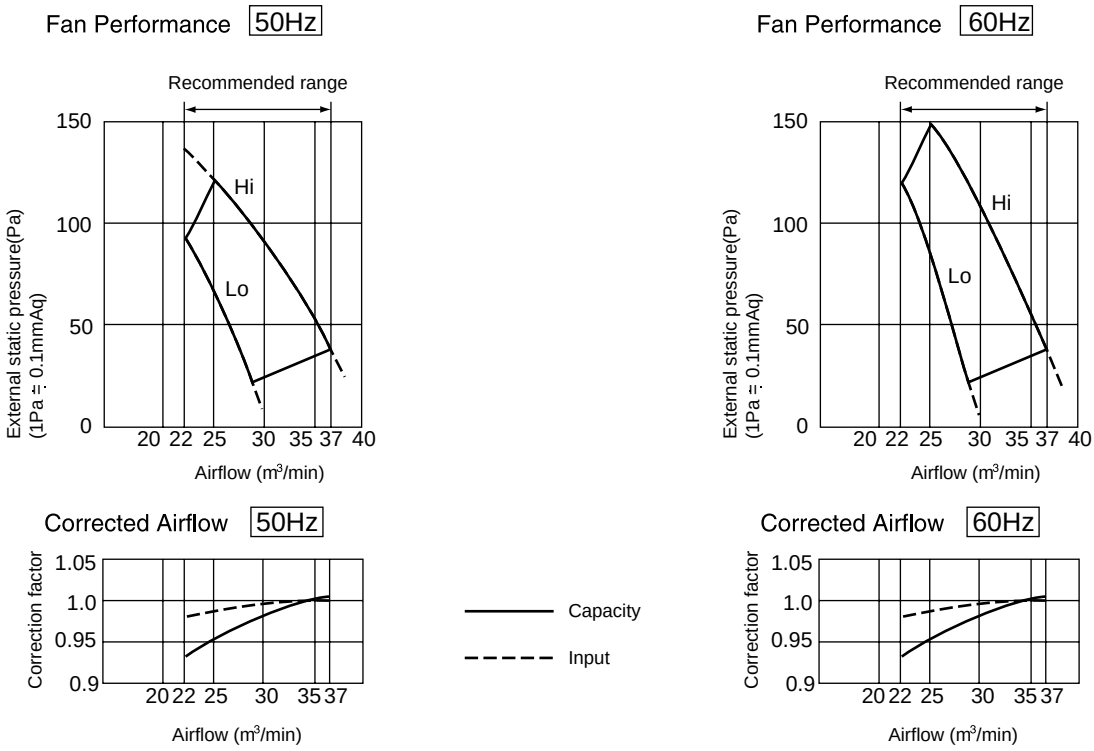
The conversion factor is : 1(Mpa) =10.2 (kgf/cm²)

3. FAN PERFORMANCE AND CORRECTED AIRFLOW

Service Ref. : PE-3EJA2.TH
PE-3EJA3.TH

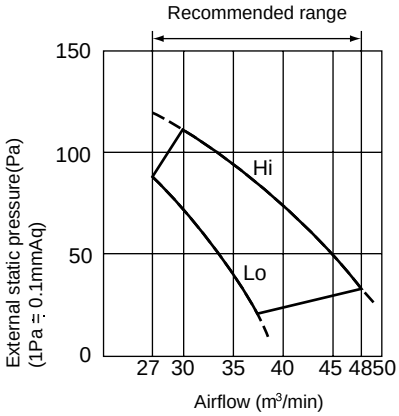


Service Ref. : PE-4EJSA 2.TH

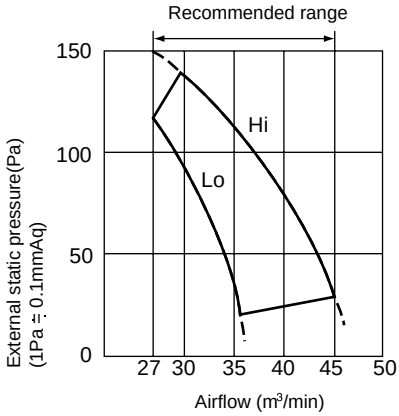


Service Ref. : PE-5EJSA 2.TH

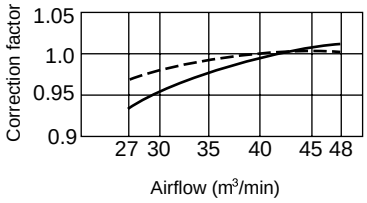
Fan Performance 50Hz

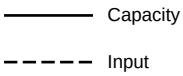


Fan Performance 60Hz

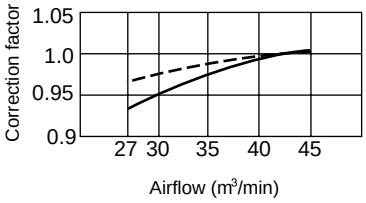


Corrected Airflow 50Hz



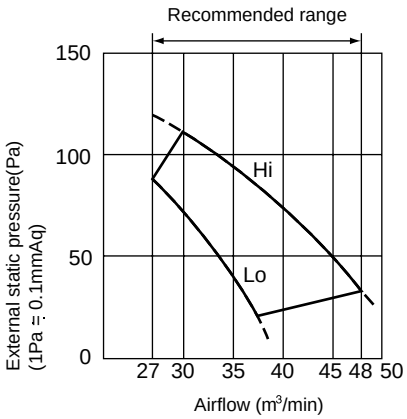


Corrected Airflow 60Hz

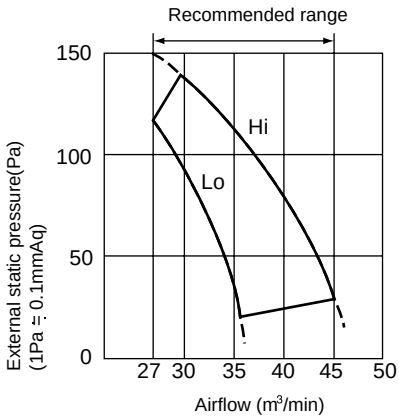


Service Ref. : PE-6EJSA 2.TH

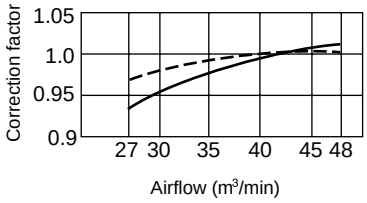
Fan Performance 50Hz

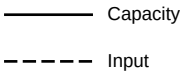


Fan Performance 60Hz

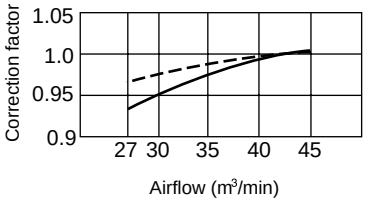


Corrected Airflow 50Hz





Corrected Airflow 60Hz



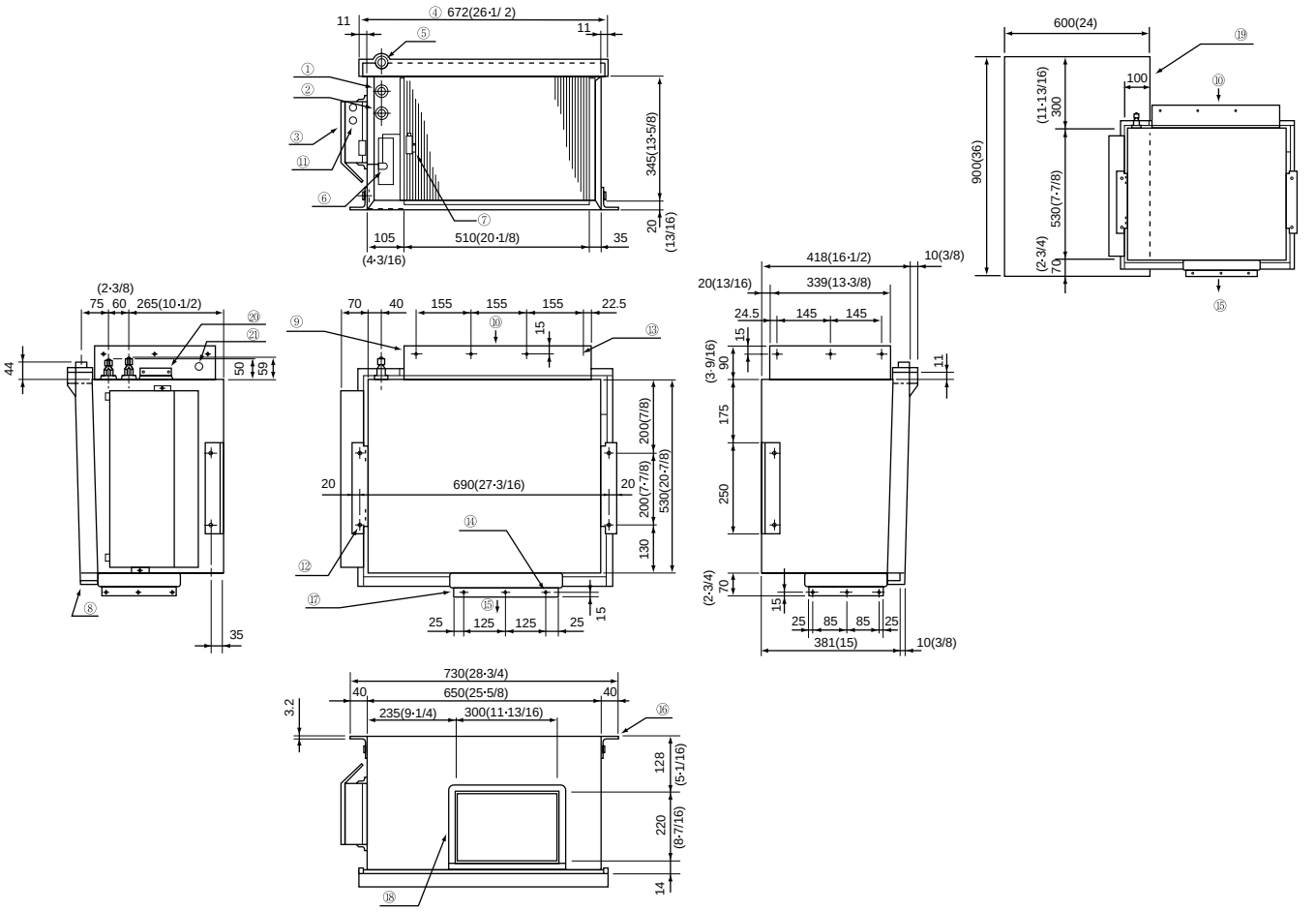
6 OUTLINES AND DIMENSIONS

1. INDOOR UNIT

PE-3EJA2.TH

PE-3EJA3.TH

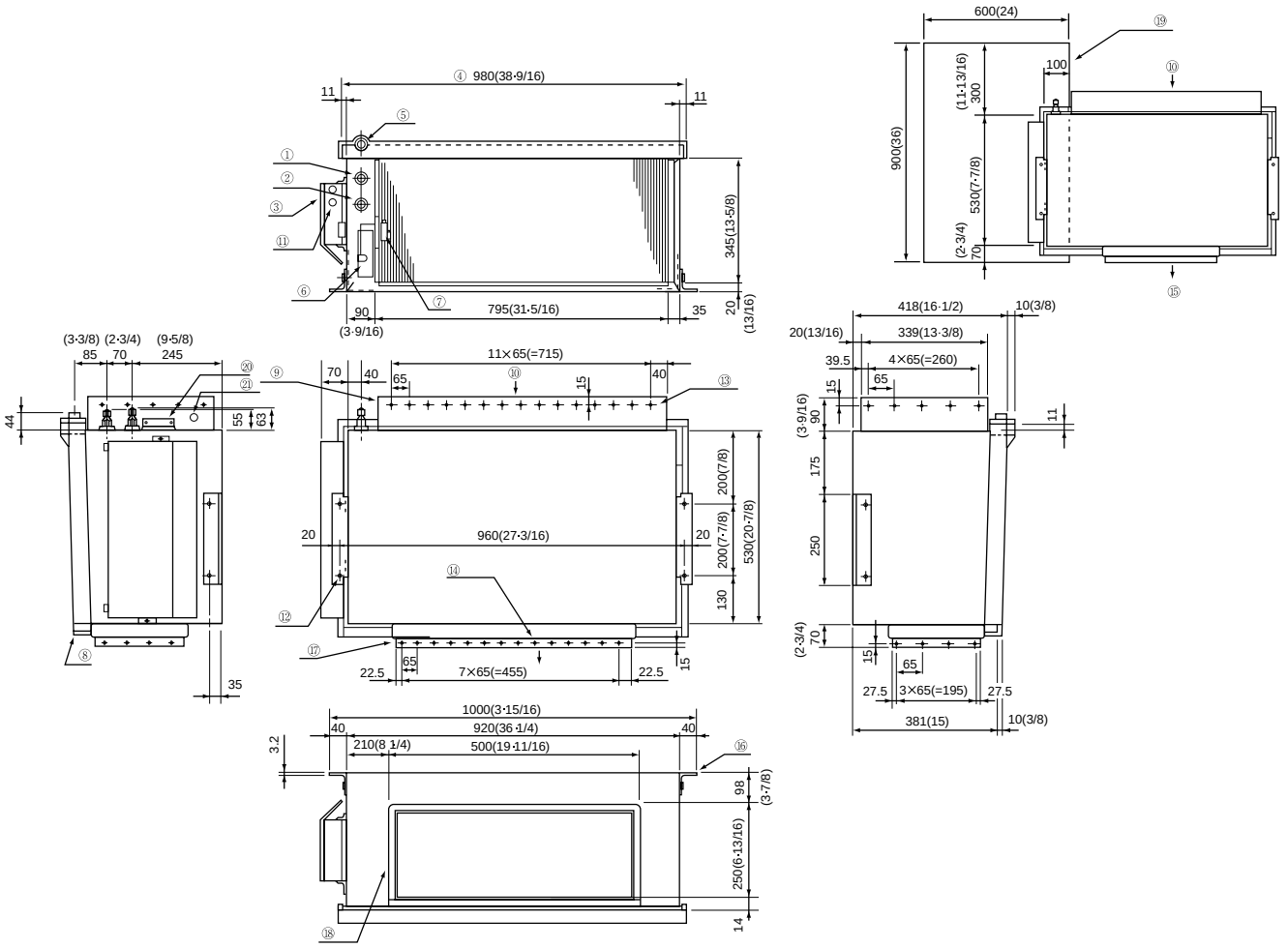
Unit : mm (inch)



①	Refrigerant-pipe flared connection ϕ9.52 (3/8)	⑫	Suspension bolt holes (4-ϕ12 (1/2))
②	Refrigerant-pipe flared connection ϕ15.88 (5/8)	⑬	14-ϕ3 (1/8) holes
③	Electrical parts box	⑭	For air outlet duct connection (12-ϕ3 (1/8) holes)
④	Drainage pan	⑮	Air outlet
⑤	Drainage pipe connection R1 (male)	⑯	Mounting plate
⑥	Service panel (Indoor coil thermistor)	⑰	Air outlet duct flange
⑦	Room temperature thermistor	⑱	Heat insulator t10 (3/8)
⑧	Heat insulator t10 (3/8)	⑲	Service space (opening) in the ceiling
⑨	Air intake duct flange	⑳	Service panel (Room temperature thermistor)
⑩	Air intake	㉑	Duct earth
⑪	Wiring entry (2-ϕ22 (7/8) holes)		

PE-4EJSA 2.TH

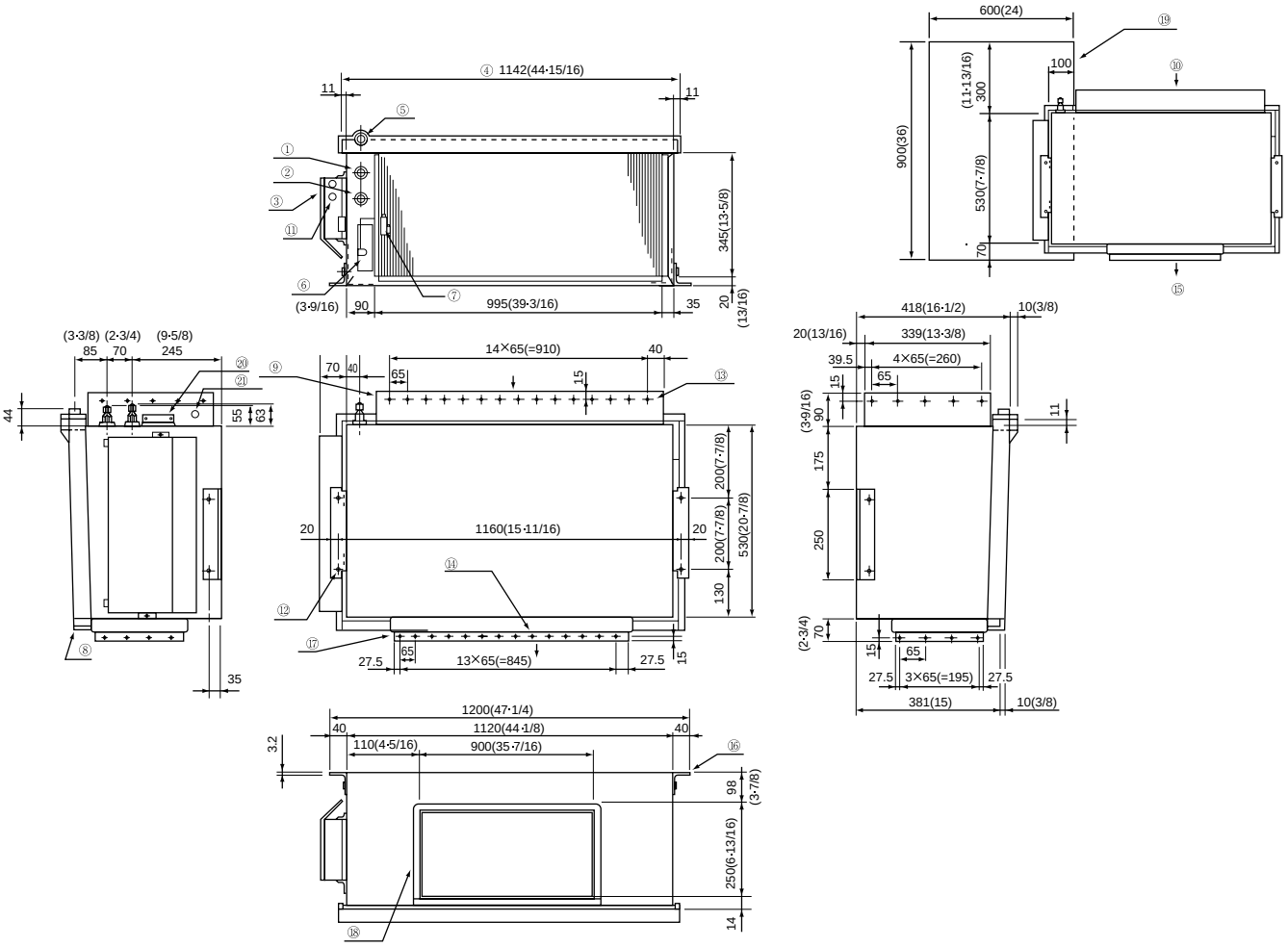
Unit : mm (inch)



①	Refrigerant-pipe flared connection ϕ9.52 (3/8)	⑫	Suspension bolt holes (4-ϕ12 (1/2))
②	Refrigerant-pipe flared connection ϕ19.05 (3/4)	⑬	34-ϕ3 (1/8) holes
③	Electrical parts box	⑭	For air outlet duct connection (24-ϕ3 (1/8) holes)
④	Drain pan	⑮	Air outlet
⑤	Drain pipe connection R1 (male)	⑯	Mounting plate
⑥	Service panel (Indoor coil thermistor)	⑰	Air outlet duct flange
⑦	Room temperature thermistor	⑱	Heat insulator t10 (3/8)
⑧	Heat insulator t10 (3/8)	⑲	Service space (opening) in the ceiling
⑨	Air intake duct flange	⑳	Service panel (Room temperature thermistor)
⑩	Air intake	㉑	Duct earth
⑪	Wiring entry (2-ϕ22 (7/8) holes)		

PE-5EJSA 2.TH
PE-6EJSA 2.TH

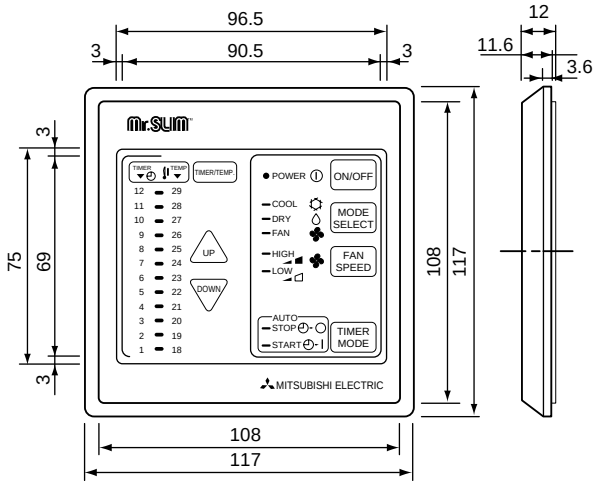
Unit : mm (inch)

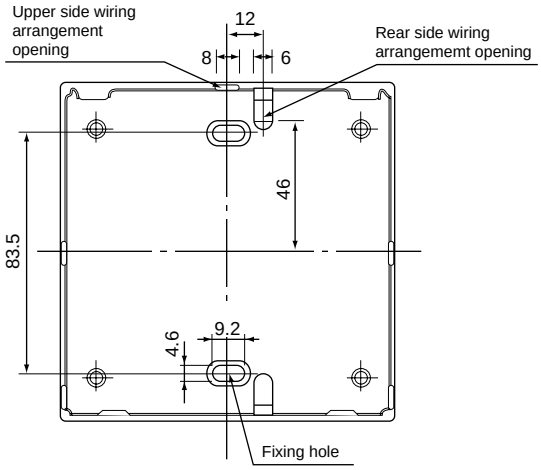


①	Refrigerant-pipe flared connection ϕ9.52 (3/8)	⑫	Suspension bolt holes (4-ϕ12 (1/2))
②	Refrigerant-pipe flared connection ϕ19.05 (3/4)	⑬	40-ϕ3 (1/8) holes
③	Electrical parts box	⑭	For air outlet duct connection (36-ϕ3 (1/8) holes)
④	Drain pan	⑮	Air outlet
⑤	Drain pipe connection R1 (male)	⑯	Mounting plate
⑥	Service panel (Indoor coil thermistor)	⑰	Air outlet duct flange
⑦	Room temperature thermistor	⑱	Heat insulator t10 (3/8)
⑧	Heat insulator t10 (3/8)	⑲	Service space (opening) in the ceiling
⑨	Air intake duct flange	⑳	Service panel (Room temperature thermistor)
⑩	Air intake	㉑	Duct earth
⑪	Wiring entry (2-ϕ22 (7/8) holes)		

2. REMOTE CONTROLLER

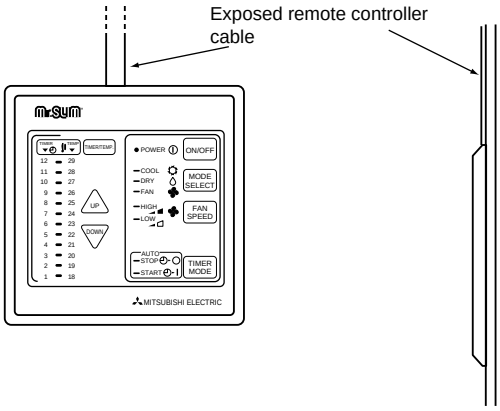
Unit : mm





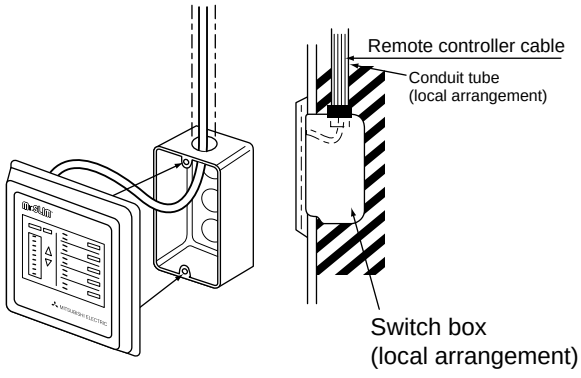
Remote controller cable installation

●For exposed remote controller cable installation



● Cable can be connected only to the top of the remote controller.
(Right side, left side, and buttom are not possible.)

●For recessed remote controller cable installation



Set screw (match with switch box), local arrangement.

Note : The cable for the remote controller has 10m (39ft) length and 12-core with connectors O.D. 5.8.

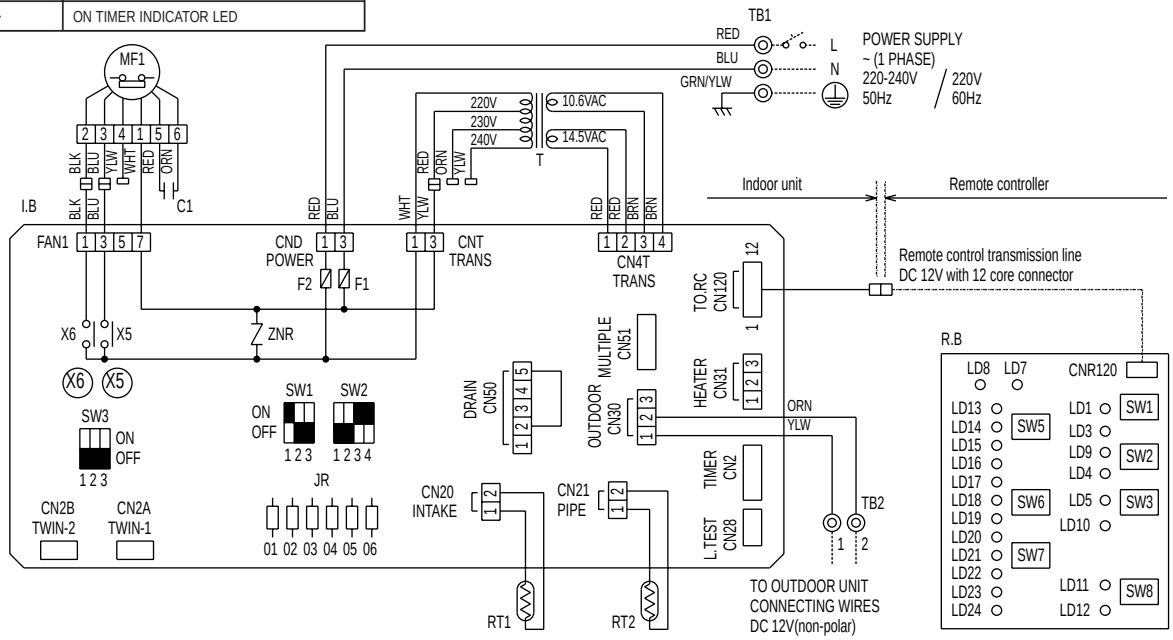
7 WIRING DIAGRAM

PE-3EJA2.TH / PE-3EJA3.TH / PE-4EJSA2.TH / PE-5EJSA2.TH / PE-6EJSA2.TH

SYMBOL	NAME
C1	FAN MOTOR CAPACITOR
CN120<I.B>	REMOTE CONTROLLER TRANSMISSION WIRE CONNECTOR
CN51<I.B>	REMOTE INDICATOR CONNECTOR
CNR120<R.B>	REMOTE CONTROLLER TRANSMISSION WIRE CONNECTOR
FI,2<I.B>	FUSE (6.3A 250V)
I.B	INDOOR CONTROLLER BOARD
LD1<R.B>	RUN INDICATOR LED
LD3<R.B>	COOLING INDICATOR LED
LD4<R.B>	FAN MODE INDICATOR LED
LD5<R.B>	FAN HIGH INDICATOR LED
LD7<R.B>	INDICATOR MODE TEMPERATURE LED
LD8<R.B>	INDICATOR MODE TIMER LED
LD9<R.B>	DRY INDICATOR LED
LD10<R.B>	FAN LOW INDICATOR LED
LD11<R.B>	OFF TIMER INDICATOR LED
LD12<R.B>	ON TIMER INDICATOR LED

SYMBOL	NAME
LD13-24<R.B>	TEMPERATURE / TIMER REMAINING TIME INDICATOR LED
MF1	INDOOR FAN MOTOR
SW1<I.B>	FUNCTION SWITCH
SW2<I.B>	UNIT SWITCH
SW3<I.B>	EMERGENCY OPERATION SWITCH
SW1<R.B>	ON / OFF SWITCH
SW2<R.B>	OPERATION MODE SWITCH
SW3<R.B>	FAN HIGH / LOW SWITCH
SW5<R.B>	INDICATOR SWITCH
SW6<R.B>	TEMPERATURE TIMER SETTING UP SWITCH
SW7<R.B>	TEMPERATURE TIMER SETTING DOWN SWITCH
SW8<R.B>	TIMER CONTINUOUS ON / OFF SWITCH

SYMBOL	NAME
R.B	REMOTE CONTROLLER BOARD
T	TRANSFORMER
TB1	POWER SUPPLY TERMINAL BLOCK
TB2	INDOOR / OUTDOOR CONNECTING WIRE TERMINAL BLOCK
RT1	ROOM TEMPERATURE THERMISTOR (0°C / 15kΩ, 25°C / 5.4kΩ DETECT)
RT2	INDOOR COIL THERMISTOR (0°C / 15kΩ, 25°C / 5.4kΩ DETECT)
X5<I.B>	FAN MOTOR AUXILIARY RELAY
X6<I.B>	FAN MOTOR AUXILIARY RELAY
ZNR<I.B>	VARISTOR
JR	FUNCTION SELECTOR JUMPER RESISTORS



NOTES:

1. Since the indoor transformer (T) is connected with 220V wiring, if 230V or 240V power is used, change the wiring connection as shown fig : 1 ※.

When power supply is fig ※1

240V	240	YELLOW
230V	230	ORANGE
	220	RED

Since the indoor fan motor (MF1) is connected with 220V 60Hz power, if 200V~240V 50Hz power is used, change the wiring connection as shown fig : 2 ※.

fig ※2

Indoor fan motor (MF1) for 200V ~ 240V 50Hz.

BLUE	LD	200—220 / 230—240	YELLOW
	LD	220	BLUE

2. Be sure to refer the outdoor unit electric wiring diagram before wiring of outdoor side unit.
3. Symbols used in wiring diagram above are. ◎ : Terminal block,□□: Connector.
4. Emergency operation
   If remote controller or microcomputer fails but there is no other trouble, emergency operation is possible by setting dip switch [SW3<I. B>] on the indoor controller board.

[Check items]
(1) Compressor and fan.
(2) Check the trouble position using self diagnostic function. If the result of self diagnosis indicates protective device such as freeze protection is functioning emergency operation is not possible unless the cause is removed.
(3) In emergency operation, the operation made by only ON / OFF circuit breaker manually [ON / OFF with remote controller is not possible].

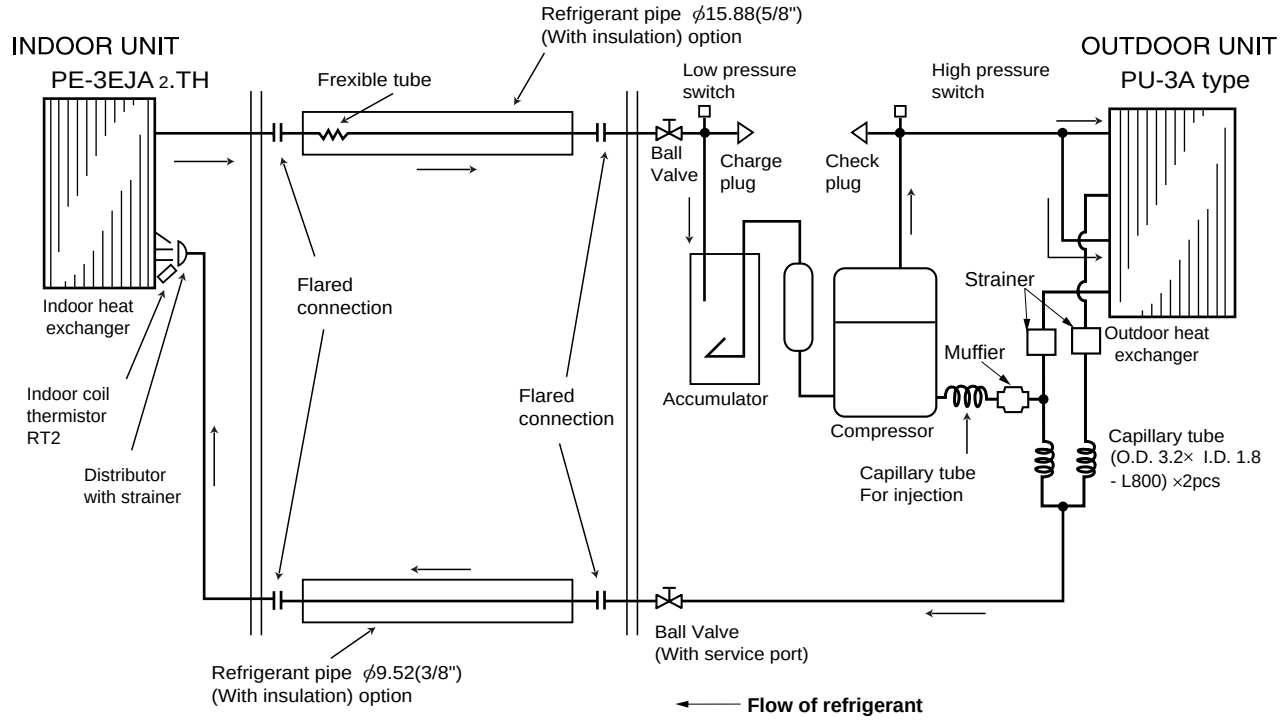
[Emergency operation procedure]
(1) Cooling is possible by setting 1 · 2 ON and 3 OFF for the dip switch (SW3<I.B>) at indoor controller board.
(2) Turn on outdoor unit side circuit breaker, then indoor unit side circuit breaker in this order.
(3) During emergency operation indoor fan runs at high.
(4) Thermostat will not function.
(5) Do not cooling for more than 10 hours (the indoor unit heat exchanger can freeze).

DWG NO. BG79N636H01

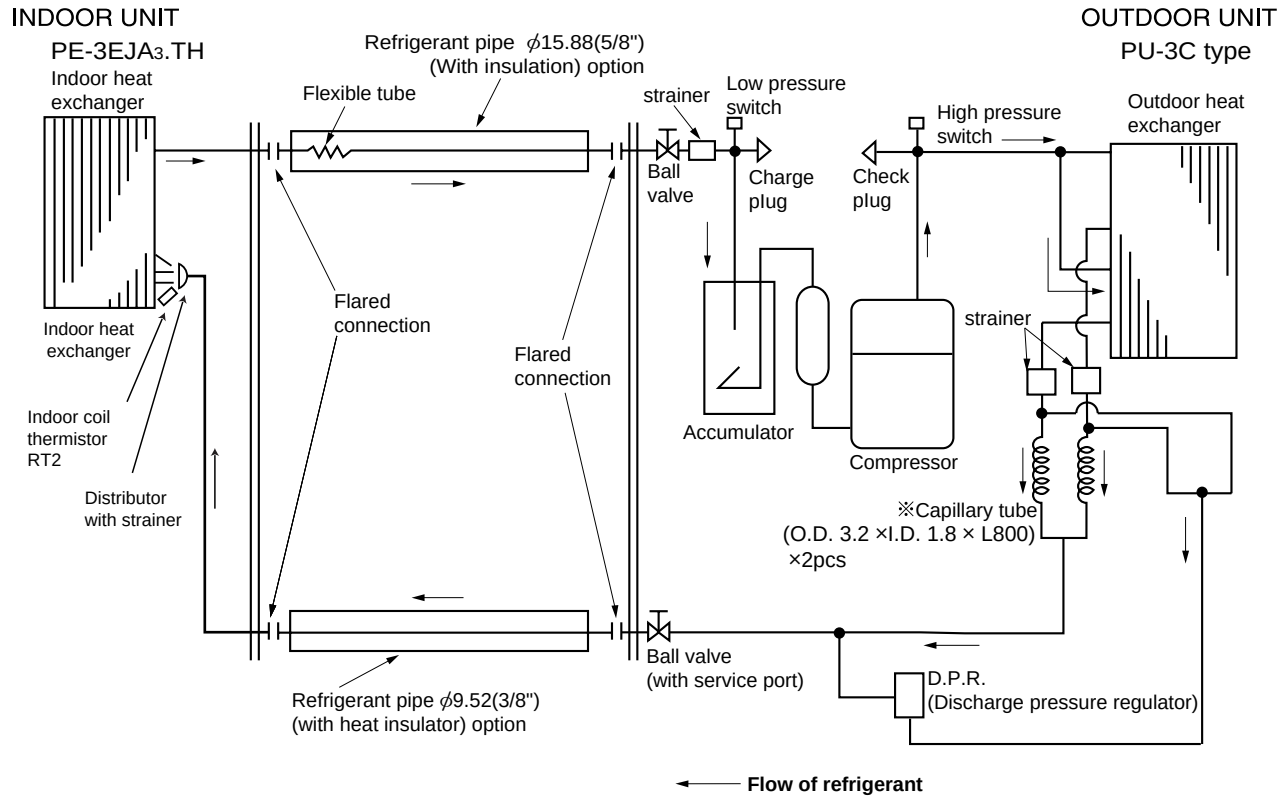
8 REFRIGERANT SYSTEM DIAGRAM

PE-3EJA2.TH / PU-3VJA1.TH, PU-3YJA1.TH, PU-3NJA1
PE-3EJA3.TH, / PU-3NJA1

Unit : mm

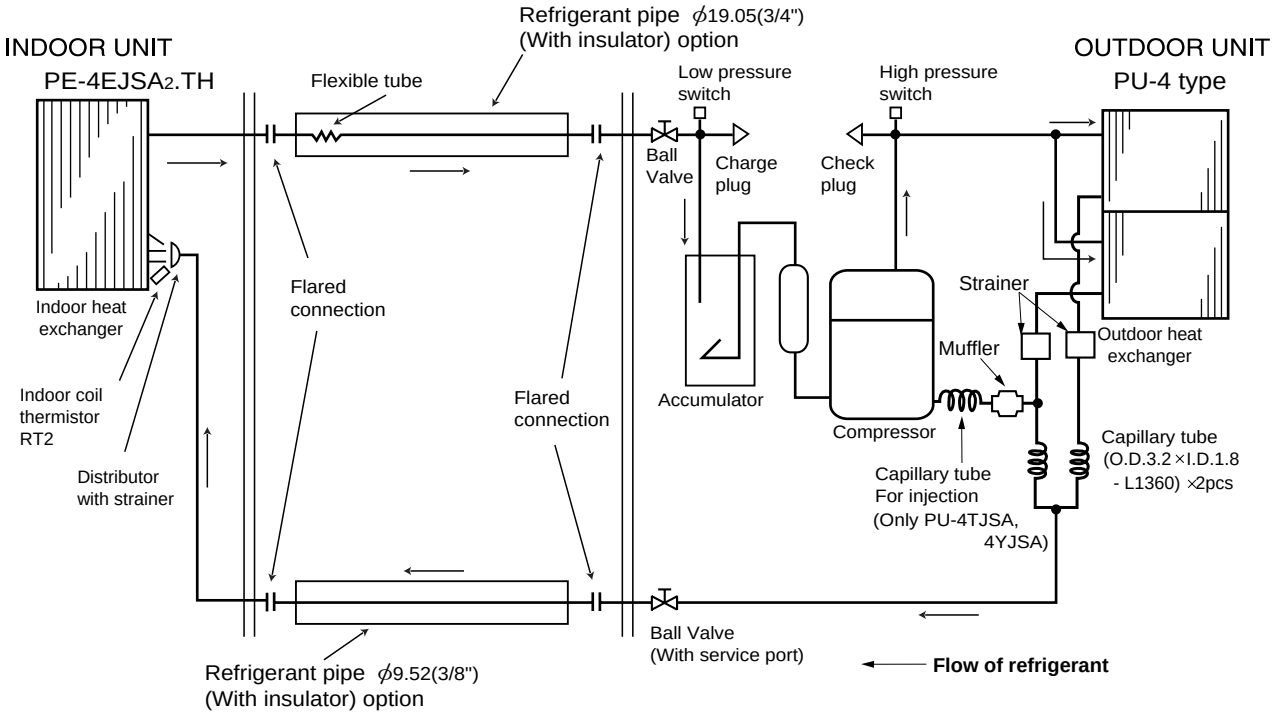


PE-3EJA3.TH / PU-3VJC.TH, PU-3YJC.TH

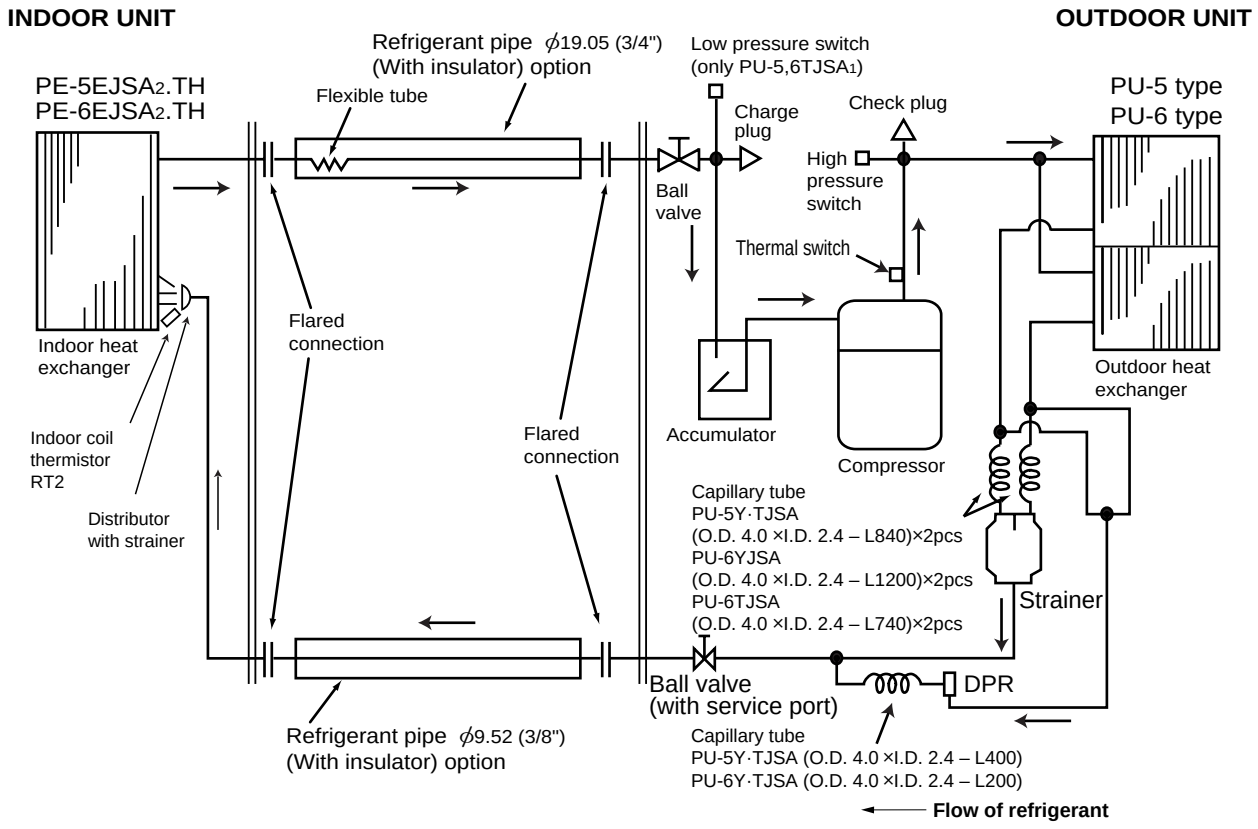


PE-4EJSA2.TH / PU-4VLJSA1.TH, PU-4YJSA1.TH, PU-4TJSA2

Unit : mm

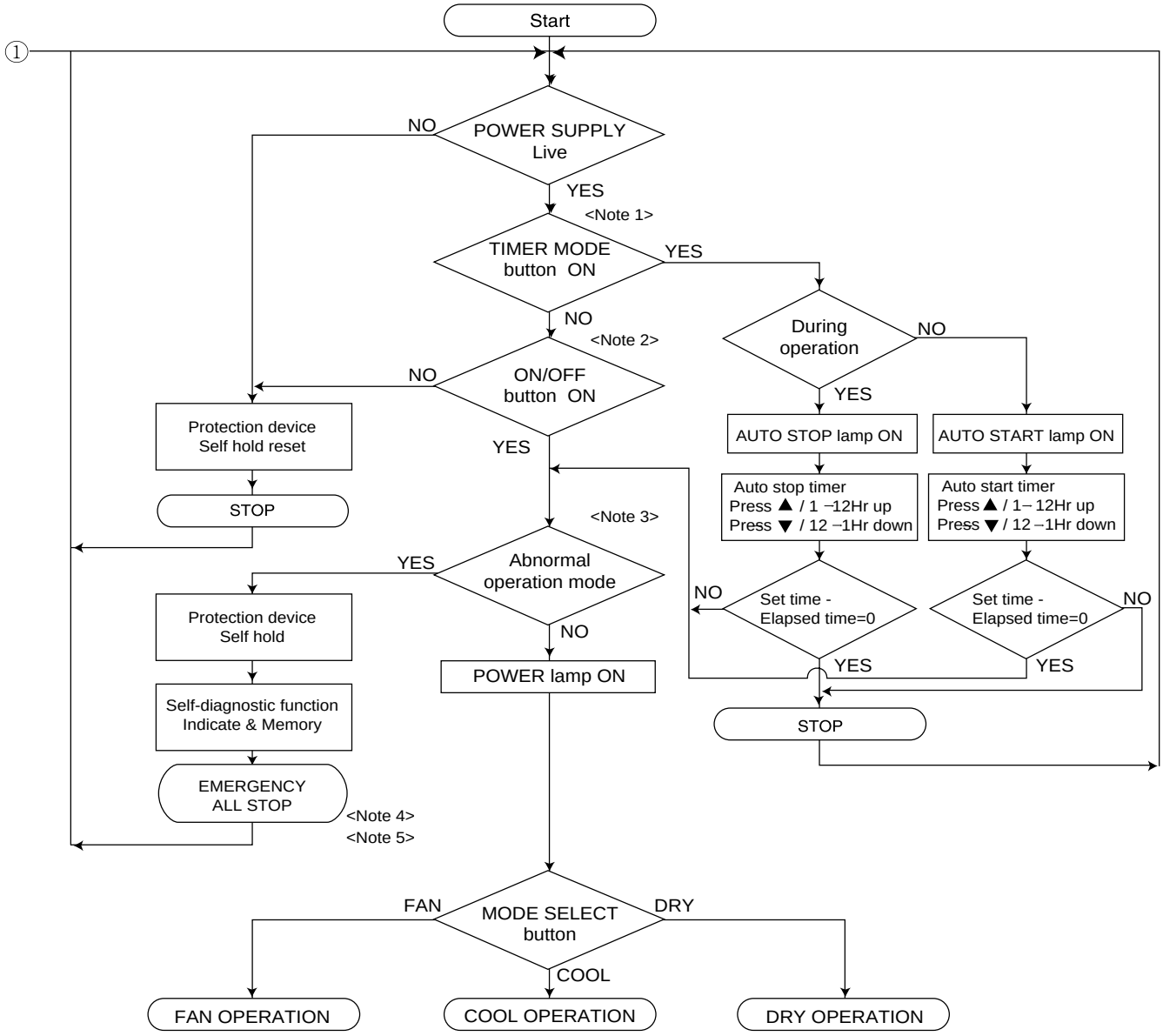


PE-5EJSA2.TH / PU-5YJSA.TH, PU-5TJSA1
PE-6EJSA2.TH / PU-6YJSA.TH, PU-6TJSA1



9 OPERATION FLOW-CHART

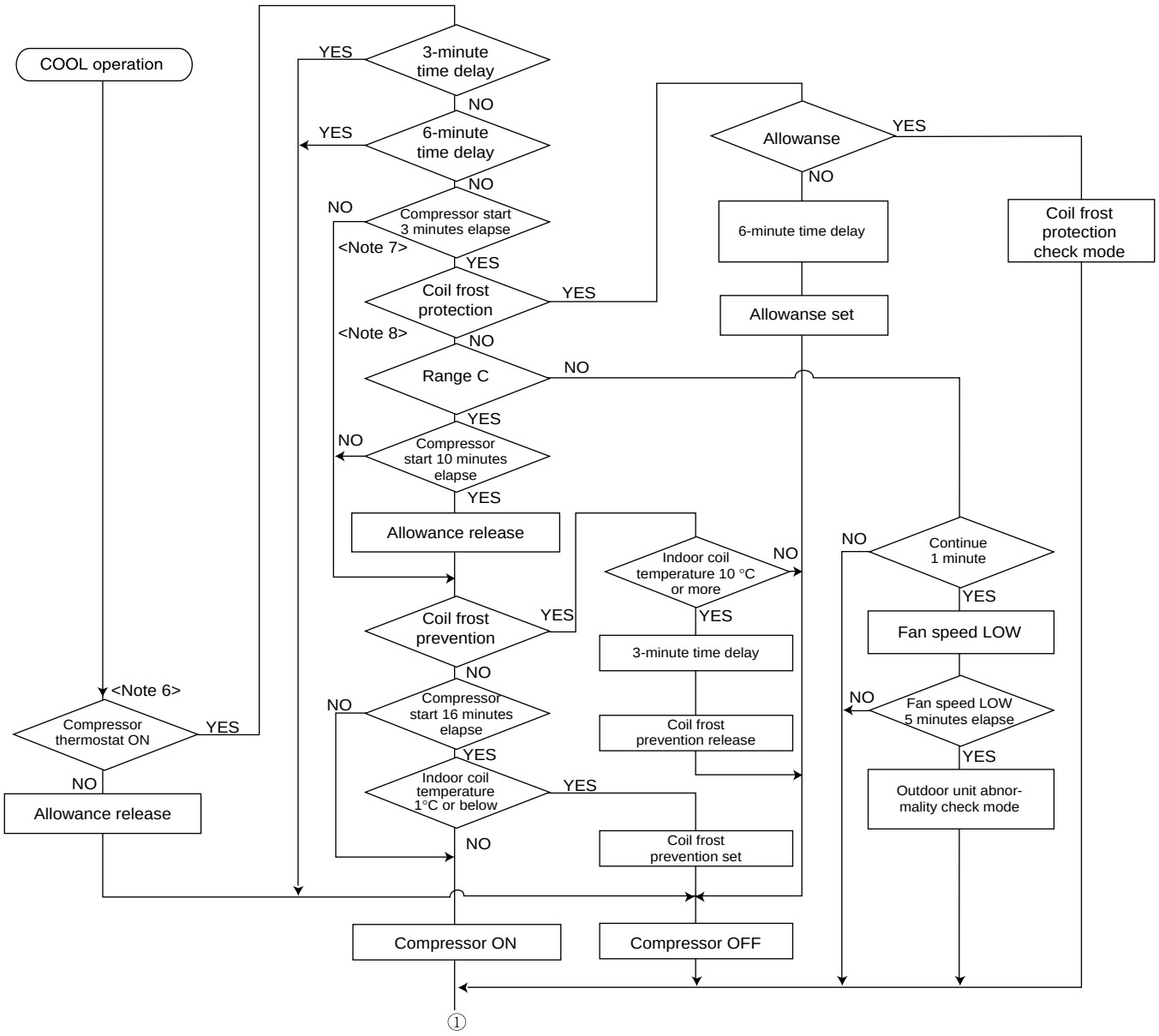
1. Main operation



Note 1. Refer to page 33 for timer mode details.
Note 2. The unit starts operation by pressing the ON / OFF switch when unit is OFF.
During operation, the unit stops operation by pressing the ON / OFF switch.
In addition, operation can be turned ON / OFF with the centralized remote controller or the remote switch.
Note 3. The factors which cause "abnormal operation mode" are as follows.
- Outdoor unit abnormal operation.
- Fault of room temperature thermistor (RT1).
- Fault of indoor coil thermistor (RT2).
- Indoor coil frost protection mode.
- Drain water overflow prevention mode.

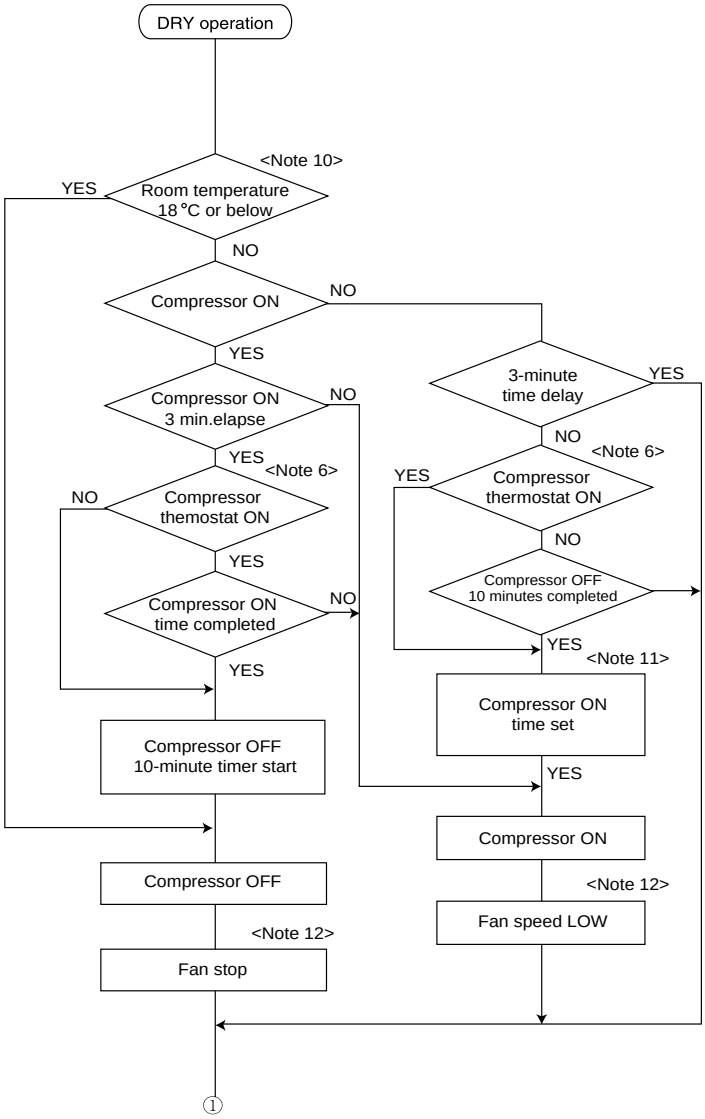
Note 4. The indoor fan runs on the low speed for 1 minute to eliminate remaining heat.
Note 5. The compressor will not start for 3 minutes after the stop to protect the compressor.

2. COOL operation



Note 6. The thermostat is continuously ON during the test run.
Note 7. Refer to page 31 for coil frost protection.
Note 8. Range A : Indoor coil temperature is more than 5 degrees above room temperature.
Range B : Indoor coil temperature is within 5 degrees either way of room temperature.
Range C : Indoor coil temperature is more than 5 degrees below room temperature.

3. DRY operation



Note 10. When the room temperature is 18°C or below, the compressor can not turn ON. When the room temperature rises to 19°C or above, the compressor will start operation after a 3-minute time delay.
Note 11. Refer to page 32 for the compressor operation time.
Note 12. In DRY operation, the indoor fan runs on the low speed during the compressor ON and stops during the compressor OFF.

10 MICROPROCESSOR CONTROL

1. OUTLINE OF MICROPROCESSOR CONTROL

INPUT to remote controller

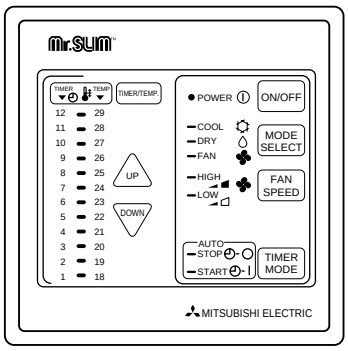
- ON-OFF switching.
- COOL-FAN selector switching.
- HIGH-LOW fan speed switching.
- TIMER mode selector switching.
- Thermostat setting.
- Timer setting.
- Self-diagnostic troubleshooting.
- Test run switching.

REMOTE CONTROLLER

- Transmits and receives orders.

OUTPUT to remote controller

- Indication lamps lights.

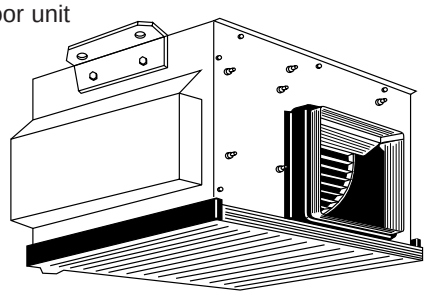


12

12V DC

Polar, twelve (12) - core cable
Maximum length 50m (164ft)

Indoor unit



INPUT from indoor unit

- Room temperature thermistor (RT1)
- Indoor coil thermistor (RT2)

INDOOR CONTROLLER BOARD

- Receives orders from remote controller and temperature data from indoor unit.
- Processes orders and data.
- Transmits the power of indication lamp to remote controller.
- Controls indoor and outdoor operation.
- Self-diagnostic function.

※ System control operation.<Optional>
※ Emergency operation.

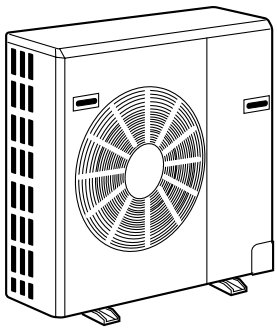
OUTPUT to indoor unit

- Fan : ON-OFF.
- Fan speed : HIGH-LOW.
- Emergency stop.

Non - polar, two (2) - core cable

12V DC

Outdoor unit



INPUT from outdoor unit

- Compressor protection device working

OUTDOOR UNIT

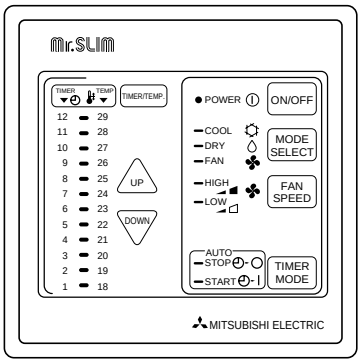
- Receives order from indoor controller.
- Emergency stop.

OUTPUT to outdoor unit

- Compressor motor and outdoor fan motor : ON - OFF

2. INDOOR UNIT CONTROL

2-1 COOL operation



<How to operate>

① Press POWER ON / OFF button.

② Press MODE SELECT button to set operation mode to COOL.

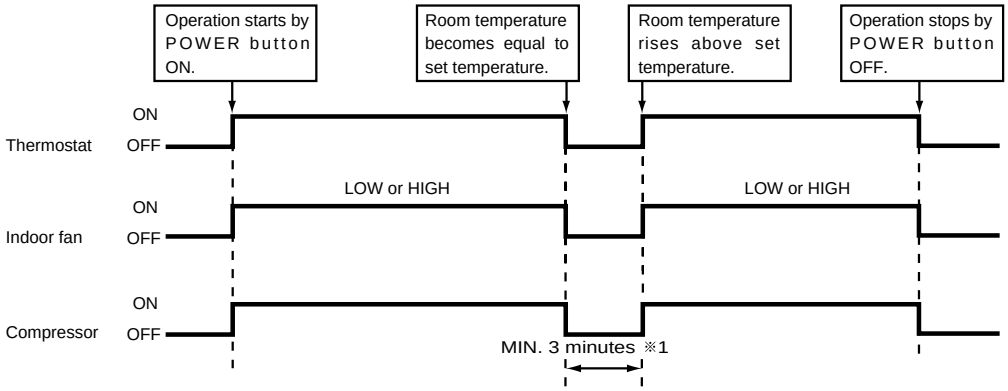
③ Check [TEMP] lamp is ON and set desired temperature with UP or DOWN button.

NOTES : 1. When [TIMER] lamp is ON, press DISPLAY SELECT button to change the display to temperature mode.

2. Set temperature changes by 1°C in the range 18 ~ 29°C each time UP or DOWN button is pressed.
3. The lighting lamp shows the set temperature, and the flashing lamp shows the room temperature.
   When the room temperature is equal to the set temperature, the lamp keeps lighting, 0.5 seconds brightly and 0.5 seconds faintly.

Steady Flash OFF

<COOL operation time chart>



※1 Even if the room temperature rise above the set temperature during this period, the compressor will not start until this period has ended.

(1) Compressor control

① 3 minute time delay
To prevent overload, the compressor will not start within 3 minutes after stop.

② The compressor runs when the room temperature is higher than the set temperature.
The compressor stops when the room temperature is equal to or lower than the set temperature.

③ The compressor stops in check mode or during protective functions.

④ Coil frost prevention
To prevent indoor coil frost, the compressor will stop when the indoor coil thermistor (RT2) reads 1°C or below after the compressor has been continuously operated for 16 minutes or more. The coil frost prevention is released under any of the following conditions.

- The indoor coil thermistor rises to 10°C or above.
- The room temperature becomes equal to or lower than the set temperature.
- COOL mode is stopped or changed to another mode.

NOTE : By cutting the jumper wire JRO2 on the indoor controller board, the temperature to start coil frost prevention changes from 1°C to -3°C.

⑤ Coil frost protection
When indoor coil temperature becomes -15°C or below, coil frost protection will proceed as follows.

<Start condition>
After the compressor has been continuously operated for 3 minutes or more, and the indoor coil temperature has been -15°C or below for 3 minutes, the coil frost protection will start.

<Coil frost protection>
Compressor stops for 6 minutes, and then restarts.
If the start condition is satisfied again during the first 10 minutes of compressor operation, both the indoor and outdoor units stop, and the remote controller displays this occurrence.

<Termination conditions>
Coil frost protection is released when the start condition is not satisfied again during the allowance, or when the COOL mode stops or changes to another mode.

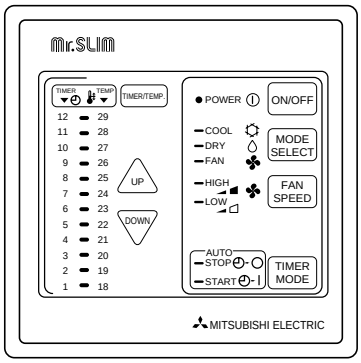
(2) Indoor fan control

Indoor fan speed LOW/HIGH depends on the remote controller setting.
However, if an outdoor unit abnormality is detected, the indoor fan speed will be LOW, regardless of the remote controller setting.

(3) Detecting abnormalities in the outdoor unit

After the compressor has been continuously operated for 3 minutes, if the difference between the difference between the indoor coil temperature and room temperature is out of RANGE C, for 1 minute, the indoor fan speed will turn to LOW. Five minutes later, if the difference is in RANGE C, the fan speed will return to the set speed. If the difference is still out of RANGE C, the outdoor unit is deemed abnormal.
Thus, the compressor will stop and the trouble location is indicated on the remote controller.
RANGE A : Indoor coil temperature is more than 5 degrees above room temperature.
RANGE B : Indoor coil temperature is within 5 degrees either way of room temperature.
RANGE C : Indoor coil temperature is more than 5 degrees below room temperature.

2-2 DRY operation



Steady Flash OFF

<How to operate>

① Press POWER ON / OFF button.
② Press MODE SELECT button to set operation mode to DRY.
③ Check [TEMP ▼] lamp is ON and set desired temperature with UP or DOWN button.

NOTES : 1. When [TIMER ▼] lamp is ON, press DISPLAY SELECT button to change the display to temperature mode.
2. Set temperature changes by 1°C in the range 18 ~ 29°C each time UP or DOWN button is pressed.
3. The lighting lamp shows the set temperature, and the flashing lamp shows the room temperature.
When the room temperature is equal to the set temperature, the lamp keeps lighting, 0.5 seconds brightly and 0.5 seconds faintly.

(1) Compressor control

① 3-minute time delay
To prevent overload, the compressor will not start within 3 minutes after stop.
② The compressor runs when the room temperature is higher than the set temperature.
The compressor stops when the room temperature is equal to or lower than the set temperature.
③ The compressor stops in check mode or during protective functions.
④ The compressor will not start when the room temperature is below 18°C.
The compressor starts intermittent operation when the power is turned ON with room temperature above 18°C. The compressor ON / OFF time depends on the thermostat ON / OFF and the room temperature as follows.
After 3 minute compressor operation,
● If the room temperature thermistor reads above 28°C with thermostat ON, the compressor will operate for 6 more minutes and then stop for 3 minutes.
● If the room temperature thermistor reads 26 °C ~28 °C with thermostat ON, the compressor will operate for 4 more minutes and then stop for 3 minutes.
● If the room temperature thermistor reads 24°C ~26°C with thermostat ON, the compressor will operate for 2 more minutes and then stop for 3 minutes.
● If the room temperature thermistor reads below 24°C with thermostat ON, the compressor will stop for 3 minutes.
● If the thermostat is OFF, regardless of room temperature, the compressor will stop for 10minutes.
⑤ Coil frost protection
Coil frost protection in DRY operation is the same as in COOL operation.

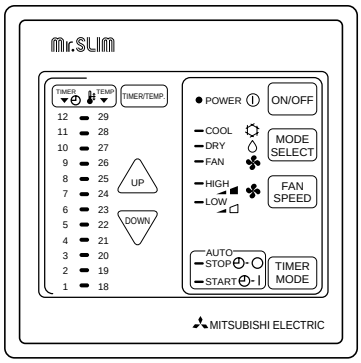
(2) Indoor fan control

The indoor fan runs on LOW speed during compressor operation. The fan speed cannot be changed with the remote controller.
Also, the indoor fan does not run during compressor OFF.

(3) Detecting abnormalities in the outdoor unit

An abnormality in the outdoor unit can not be detected in DRY operation.

2-3 FAN operation



<How to operate>

① Press POWER ON / OFF button.

② Press MODE SELECT button to set operation mode to FAN.

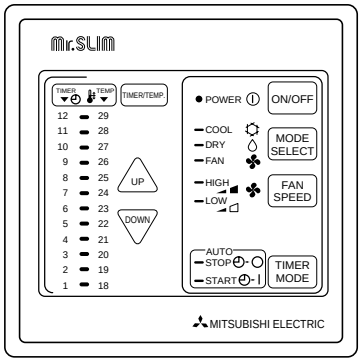
NOTES : Temperature can not be set in FAN operation.

Steady Flash OFF

(1) Indoor fan control

The indoor fan speed LOW / HIGH depends on the remote controller setting.

2-4 TIMER operation



Steady Flash OFF

<Timer function>

AUTO STOP ·····Air conditioner stops after the set time lapses.

AUTO START ·····Air conditioner starts after the set time lapses.

<How to operate • AUTO STOP timer>

① While [● POWER] lamp is lighting, press TIMER MODE button.

[AUTO STOP →○] and [TIMER ▼] lamps turn ON.

② Set the time for the AUTO STOP timer with the UP or DOWN button.

NOTE : The time setting is in 1 hour units up to 12 hours.

③ With the lapse of time, the timer lamps turn OFF one by one, showing the remaining time.

④ To cancel the AUTO STOP timer and continue operation, press the TIMER MODE button.

To cancel the AUTO STOP timer and stop operation, press the POWER ON/OFF button.

<How to operate AUTO START timer>

① While [○ POWER] lamp is OFF, press TIMER MODE button.

[AUTO START →|] and [TIMER ▼] lamps turn ON.

② Set the time for the AUTO START timer with the UP or DOWN button.

NOTE : The time setting is in 1 hour units up to 12 hours.

③ With the lapse of time, the timer lamps turn OFF one by one, showing the remaining time.

④ To cancel the AUTO START timer and keep the unit OFF, press the TIMER MODE button.

To cancel the AUTO START timer and start operation, press the POWER ON / OFF button.

2-5 Test run

The unit starts the test run by pressing both the UP and DOWN buttons simultaneously for more than two seconds during [TIMER ▼] lamp ON or the unit OFF.

- The test run automatically stops in 2 hours.
- Set temperature is not displayed during test run.
- Room temperature is displayed by the flashing green lamp when DISPLAY SELECT button is pressed.
- The test run can be released by pressing the POWER ON / OFF or the TIMER MODE button.

<Initial setting>

The units are set as follows by the factory.

1) AUTO START set time : 12hours
   AUTO STOP set time : 12 hours
2) Initial operation mode : FAN
3) Fan speed : LOW
4) Set temperature : 28°C

2-6 Self-diagnostic function

(1) When trouble occurs during operation, the unit stops and displays the trouble location with the timer lamps on the remote controller. All the other lamps are OFF normally.

(2) To activate the self-diagnostic function for service, press the UP and DOWN buttons simultaneously for more than two seconds during operation with TEMP lamp ON

(3) The timer lamps show the latest trouble. Trouble data is memorized until the next trouble occurs, even when the breaker turns OFF.

(4) All buttons except the POWER ON/OFF are unavailable during the self-diagnostic mode.

(5) To release the self-diagnostic mode, press the POWER ON /OFF button.

2-7 Emergency operation

When the remote controller or microprocessor malfunctions and no other trouble exists, emergency cooling operation is available by setting the dip switch on the indoor controller board.

[Check items]

(1) Make sure the compressor and the fans are running normally.

(2) Locate the trouble with the self-diagnostic function. If the self-diagnostic function indicates that the protection device (such as coil frost protection) is functioning, the sources must be removed before attempting emergency operation.
Emergency operation ON / OFF is activated not with the remote controller but with the circuit breaker.

[Emergency operation procedure]

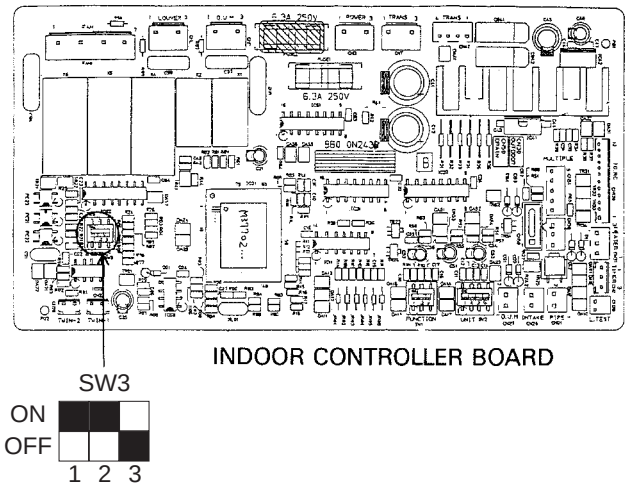
(1) Cooling operation is available by setting the dip switch (SW3<I.B>) 1 and 2 ON and 3 OFF on the indoor controller board.

(2) To start emergency operation, turn the outdoor side circuit breaker ON first, and then the indoor side circuit breaker ON.

(3) During emergency operation, the indoor fan runs on HIGH speed, the compressor runs continuously.

(4) Thermostat will not function.

(5) Do not use emergency cooling operation for more than 10 hours, as the indoor coil may freeze.



2-8 Function of jumper wire and dip switch on indoor controller board

1. Jumper wire

① JR1···Jumper wire for the auto vanes.
Cut JR01 for the unit WITHOUT auto vanes.

② JR2···Jumper wire for the temperature to start coil frost prevention
Cutting JR02 changes the temperature from +1°C to -3°C.

③ JR3···Jumper wire for set temperature adjustment in HEAT mode.
In HEAT operation, heated air stagnates in the upper part of the room. The indoor unit installed in the upper part of the room will detect the air temperature higher than the actual temperature in the living space. This difference is about 4 degrees. Therefore, the temperature detected by the room temperature thermistor should be corrected 4 degrees down. The unit with JR04 attached will make this adjustment.

④ JR4···Jumper wire for the indoor fan speed during thermostat OFF in HEAT mode
Cutting JR04 changes the speed from Extra-Low to Low.

⑤ JR5···Jumper wire for detecting abnormalities in the outdoor unit
Cutting JR05 makes this detection unavailable. (Occurrence of abnormality can not be detected.)

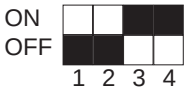
⑥ JR6···Jumper wire for auto restart function
Cutting JR06 makes the auto restart function available.

2. Dip switch

① SW1 (Function switch)

SW1-1) Switch for power supply
ON : 220V
OFF : 230V, 240V
SW1-2) Switch for single or twin control
ON : Twin control
OFF : Single control
SW1-3) Switch for unit number in twin control
(This switch is valid when SW1-2 is ON.)
ON : Unit No. 2
OFF : Unit No. 1

② SW2 (Unit switch)



SW2-1) Switch for air conditioner with or without electric heater
ON : Unit with electric heater
OFF : Unit without electric heater
SW2-2) Switch for air conditioner with or without heat pump
ON : Unit with heat pump
OFF : Unit without heat pump
SW2-3) Switch for function code
ON : 1
OFF : 0
SW2-4) Switch for function code
ON : 1
OFF : 0

③ SW3 (Emergency operation switch)

Normal operation

For emergency cooling

11 TROUBLESHOOTING

1. SELF-DIAGNOSTIC FUNCTION

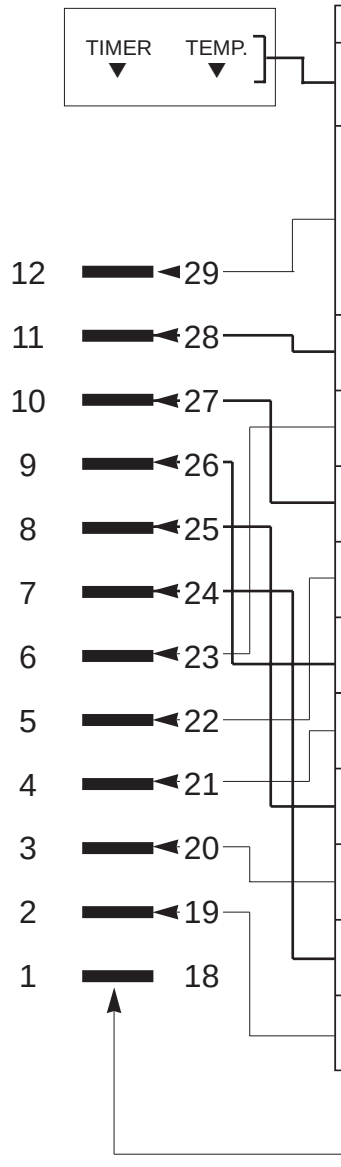
(1) When trouble occurs during operation, the unit stops and enters the self-diagnostic mode, and displays the trouble location with the timer lamps on the remote controller. All the other lamps are OFF.

(2) To activate the self-diagnostic function for service, press the UP and DOWN buttons simultaneously for more than two seconds during operation with TEMP. ▼ lamp ON.

(3) The timer lamps show the latest trouble. Trouble data is memorized until the next trouble occurs, even when the breaker turns OFF. To clear the memory, press the UP and DOWN buttons simultaneously for more than two seconds during the test run.

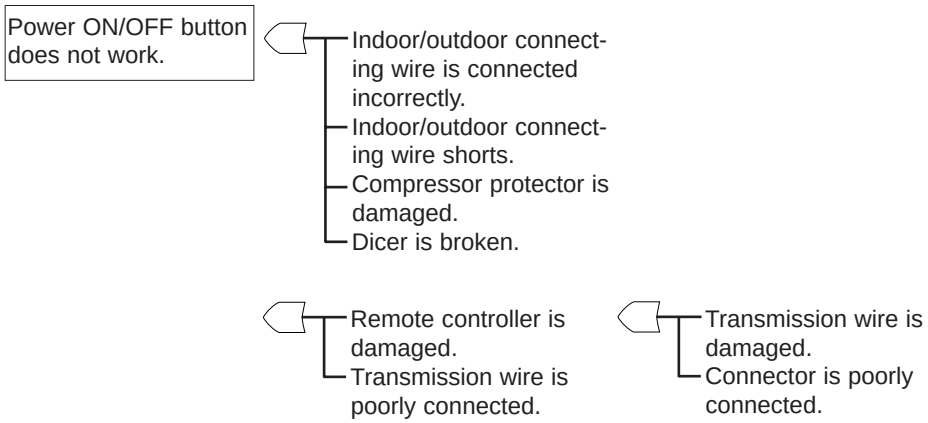
(4) All buttons except the POWER ON/OFF button are unavailable during the self-diagnostic mode.

(5) To release the self-diagnostic mode, press the POWER ON/OFF button.

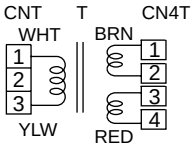
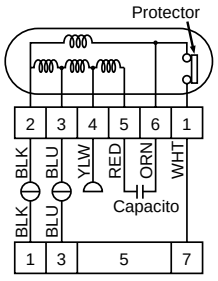


Unit	Trouble location	Cause	Measures
Transmission error in twin control		● Wrong wiring between No. 1 and No. 2 units ● Poor connector contact	● Check dip switch setting ● Check wiring
Outdoor unit		● Wrong wiring between indoor/outdoor units ● Outdoor unit abnormality detection ● Malfunction of outdoor coil thermistor ● Reversed phase detected	● Check wiring ● Check outdoor unit ● Check outdoor coil thermistor
Unit No.1	Room temperature thermistor (RT1)	● Poor connector contact ● Thermistor malfunction	● Check connector ● Check thermistor → No trouble → replace indoor controller board.
Unit No.2			
Unit No.1	Indoor coil thermistor (RT2)	● Poor connector contact ● Thermistor malfunction	● Check connector ● Check thermistor → No trouble → replace indoor controller board.
Unit No.2			
Unit No.1	Drain sensor (DS)	● Poor connector contact ● Thermistor malfunction	● Check connector ● Check thermistor → No trouble → replace indoor controller board.
Unit No.2			
Unit No.1	Drain overflow protection	● Drain pump malfunction ● Drain sensor improperly mounted	● Check drain pump ● Check drain sensor → No trouble → replace indoor controller board.
Unit No.2			
Unit No.1	Coil frost or overheat prevention	● Air passage short cycle ● Air filter clogged ● Indoor fan malfunction	● Remove blockage ● Check air filter ● Check indoor fan
Unit No.2			

2. OTHER TROUBLES AND CAUSES


Power ON/OFF button does not work.
Indoor/outdoor connecting wire is connected incorrectly.
Indoor/outdoor connecting wire shorts.
Compressor protector is damaged.
Dicer is broken.
Remote controller is damaged.
Transmission wire is poorly connected.
Transmission wire is damaged.
Connector is poorly connected.

3. How to check the parts PE-EJ(S)A.TH

<table>
<tr><th>Parts name</th><th>Check points</th></tr>
<tr><td>Room temperature thermistor (RT1)
Indoor coil thermistor (RT2)</td><td>Disconnect the connector, then measure the resistance using a tester.
(Surrounding temperature 10°C~30°C)
<table><tr><th>Normal</th><th>Abnormal</th></tr><tr><td>4.3kΩ~9.6kΩ</td><td>Open or short</td></tr></table>(Refer to the thermistor)</td></tr>
<tr><td>Trans
 
</td><td>Disconnect the connector and measure the resistance using a tester.
<table><tr><th></th><th>Normal</th><th>Abnormal</th></tr><tr><td>CNT(1)-(3)</td><td>WHT App. 135Ω</td><td rowspan="3">Open or short</td></tr><tr><td>CN4T(1)-(2)</td><td>BRN App. 0.5~1.0Ω</td></tr><tr><td>CN4T(3)-(4)</td><td>RED App. 1.0~2.0Ω</td></tr></table></td></tr>
<tr><td>Fan motor
 
</td><td>Measure the resistance between the terminals using a tester.
(Surrounding temperature 20°C)
<table><tr><th rowspan="3">Motor terminal
or
Relay connector</th><th colspan="3">Normal</th><th rowspan="3">Abnormal</th></tr><tr><th colspan="3">PE-EJ(S)A</th></tr><tr><th>3EJA2, 3EJA3</th><th>4EJSA2</th><th>5EJSA2, 6EJSA2</th></tr><tr><td>WHT-BLK</td><td>46.38Ω</td><td>20.63Ω</td><td>15.26Ω</td><td rowspan="4">Open or short</td></tr><tr><td>BLK-BLU</td><td>17.25Ω</td><td>8.05Ω</td><td>5.118Ω</td></tr><tr><td>BLU-YLW</td><td rowspan="2">18.37Ω
(BLU-RED)</td><td>3.18Ω</td><td>2.648Ω</td></tr><tr><td>YLW-RED</td><td>16.02Ω</td><td>14.49Ω</td></tr></table></td></tr>
</table>

<Thermistor Characteristic graph>

Thermistor for lower temperature

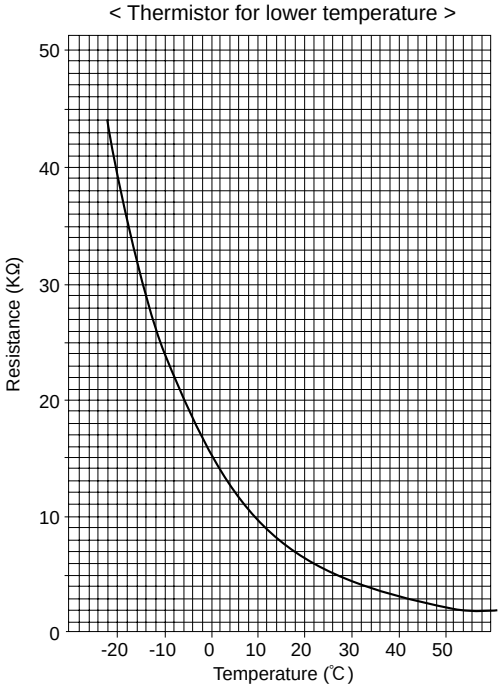
Room temperature thermistor(RT1)
Indoor coil thermistor(RT2)

Thermistor R_0=15kΩ ± 3%
Fixed number of B=3480kΩ ± 2%

$$Rt = 15\exp\left\{3480\left(\frac{1}{273+t} - \frac{1}{273}\right)\right\}$$

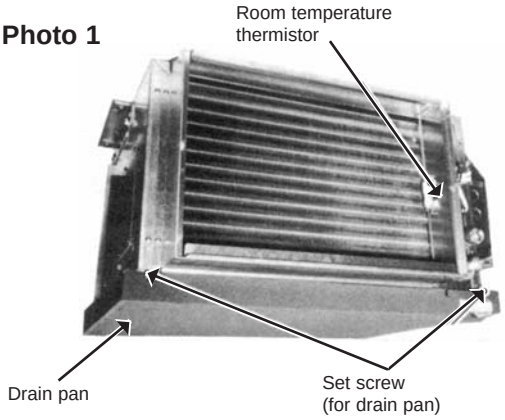
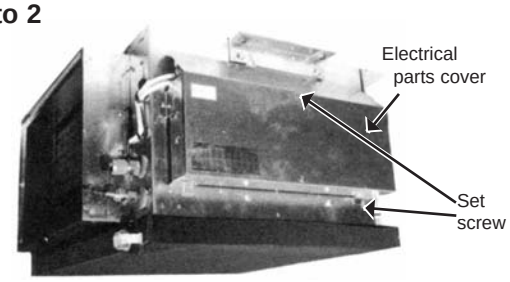
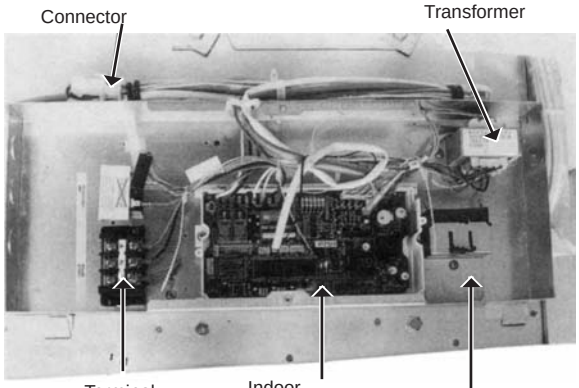
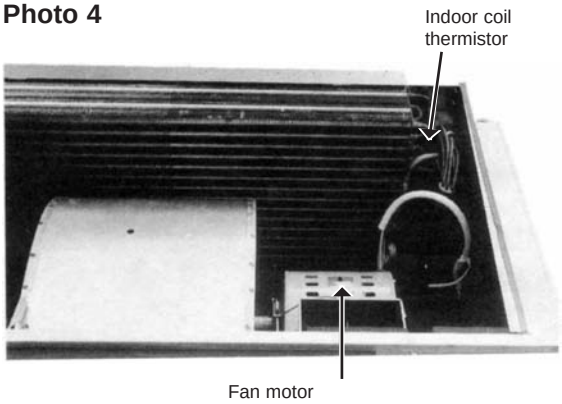
0℃	15kΩ
10℃	9.6kΩ
20℃	6.3kΩ
25℃	5.2kΩ
30℃	4.3kΩ
40℃	3.0kΩ

< Thermistor for lower temperature >



12 DISASSEMBLY PROCEDURE

PE-3EJA2.TH
PE-3EJA3.TH

OPERATING PROCEDURE	PHOTOS&ILLUSTRATIONS
1. Removing the drain pan (1) Unscrew each set screw on the right and left, and remove the drain pan pushing it toward the back. (See Photo 1)	**Photo 1** 
2. Removing the electrical parts (1) Remove the electrical parts cover. (set screw ✕ 2) and the parts as blow (See Photo 2) ● Indoor controller board ● Transformer ● Run capacitor ● Fuse (6.3A) ● Terminal block ● Room temperature thermistor (See Photo 3)	**Photo 2**  **Photo 3** 
3. Removing the indoor coil thermistor (1) Remove the drain pan. (See Photo 1) (2) Remove the electrical parts cover. (See Photo 2) (3) Remove the set wire of the indoor coil thermistor. (See Photo 4)	**Photo 4** 

OPERATING PROCEDURE

4. Removing the fan

Note : Perform the following with the indoor unit lowered down to the floor.

(1) Remove the drain pan. (See Photo 1)

(2) Disconnect the connector for the fan motor. (See Photo 3)

(3) Take out the fan after removing the 7 set screws of the fan plate. (See Photo 5 or 6.)

(4) Unscrew four set screws of the bell mouth and remove the bell mouth. (See Photo 7.)

(5) Loosen the set screw of the fan to pull out the sirocco fan. (See Photo 7.)

(6) Unscrew the four set screws of the motor fitting, and remove the fan motor. (See Photo 8.)

PHOTOS

Photo 5

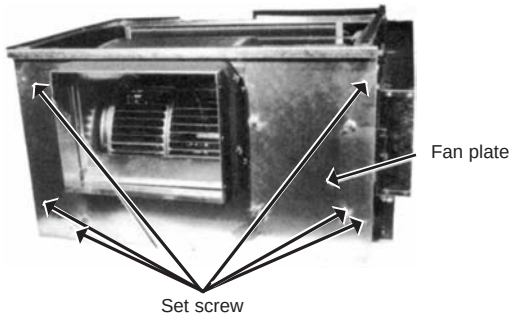


Photo 6

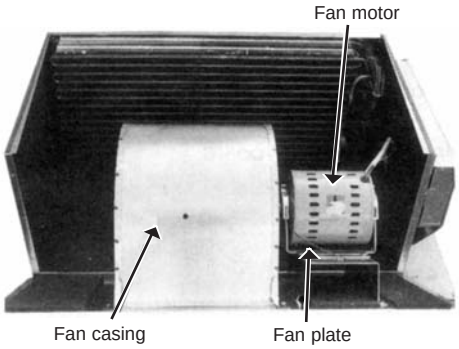


Photo 7

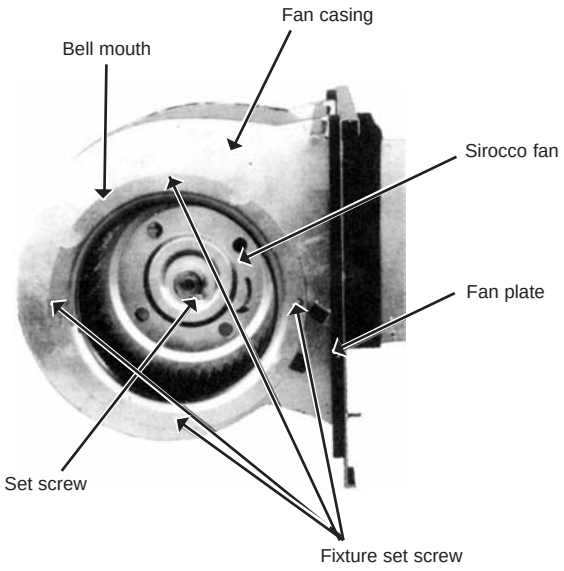
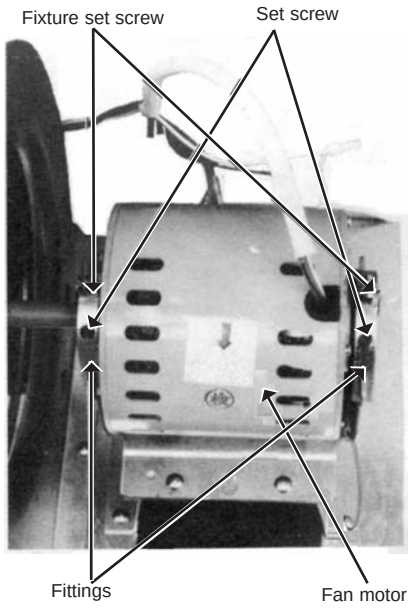
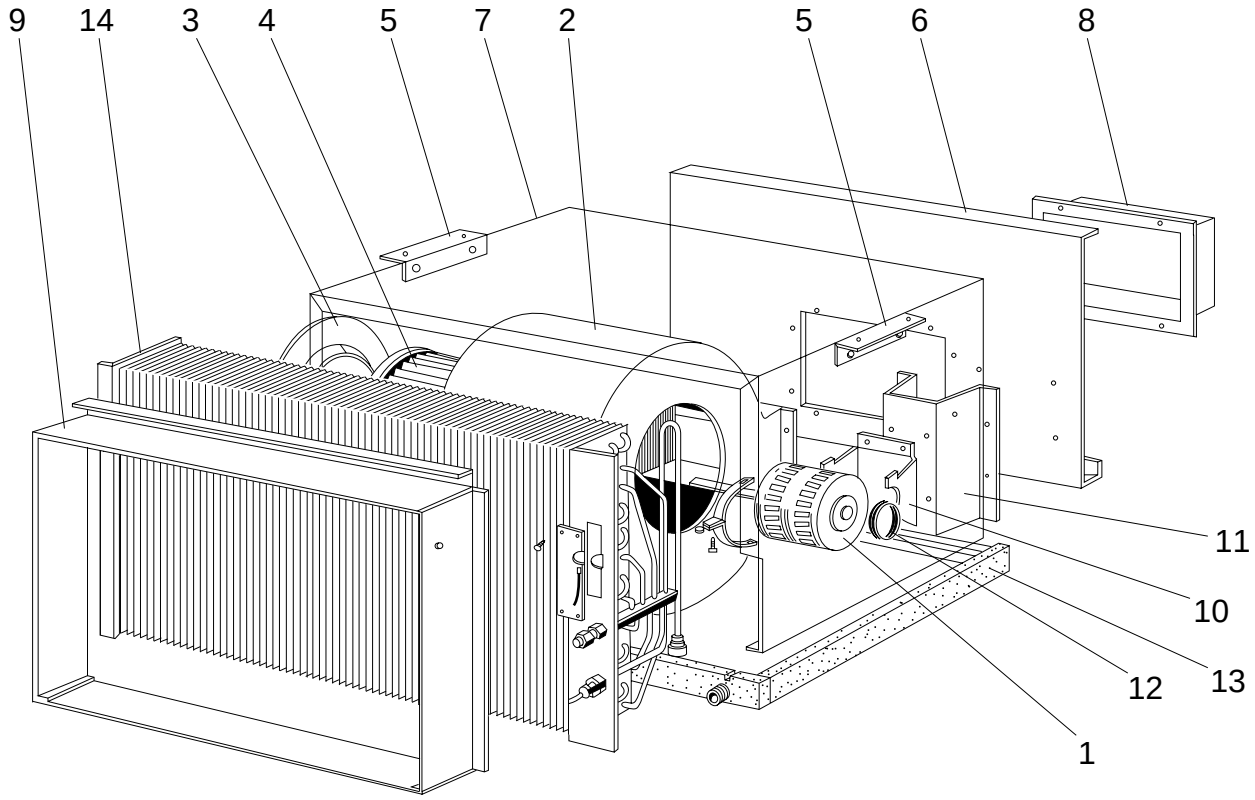


Photo 8



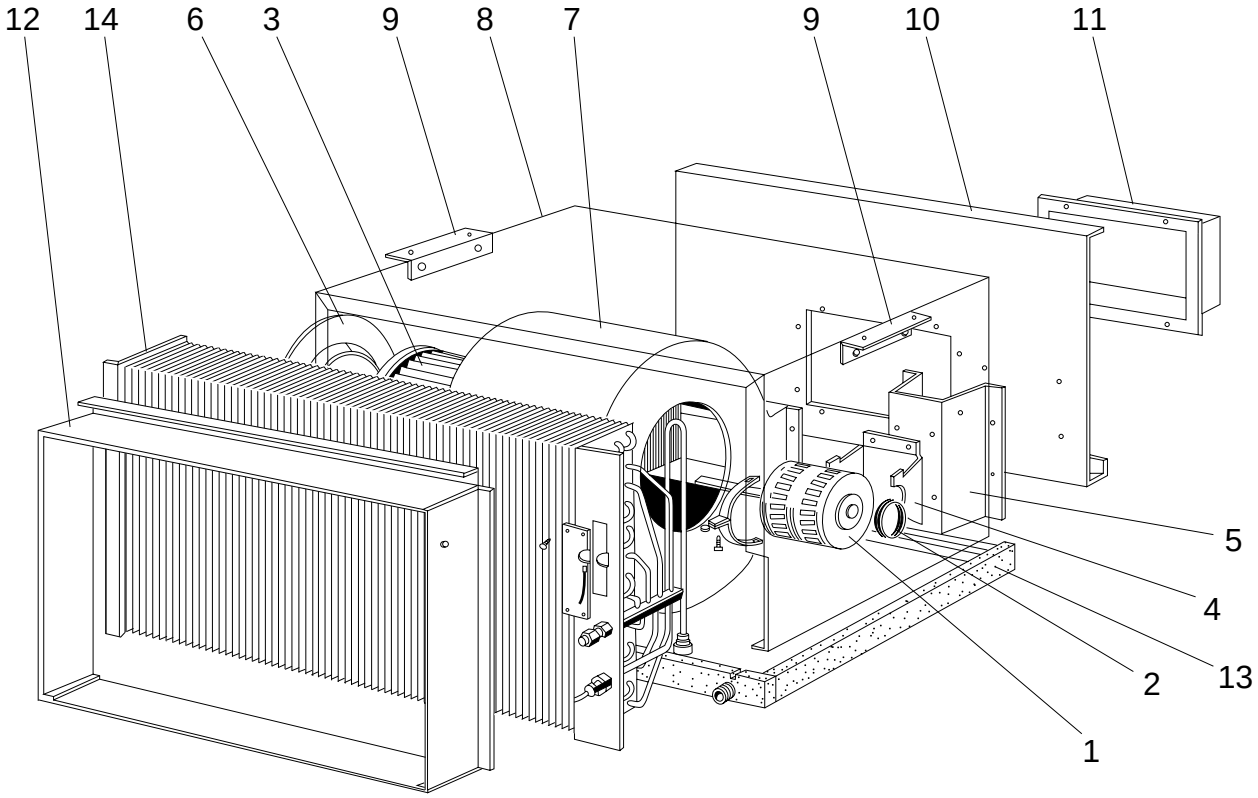
13 PARTS LIST

STRUCTURAL PARTS
PE-3EJA 1.TH
PE-3EJA 2.TH
PE-3EJA 3.TH



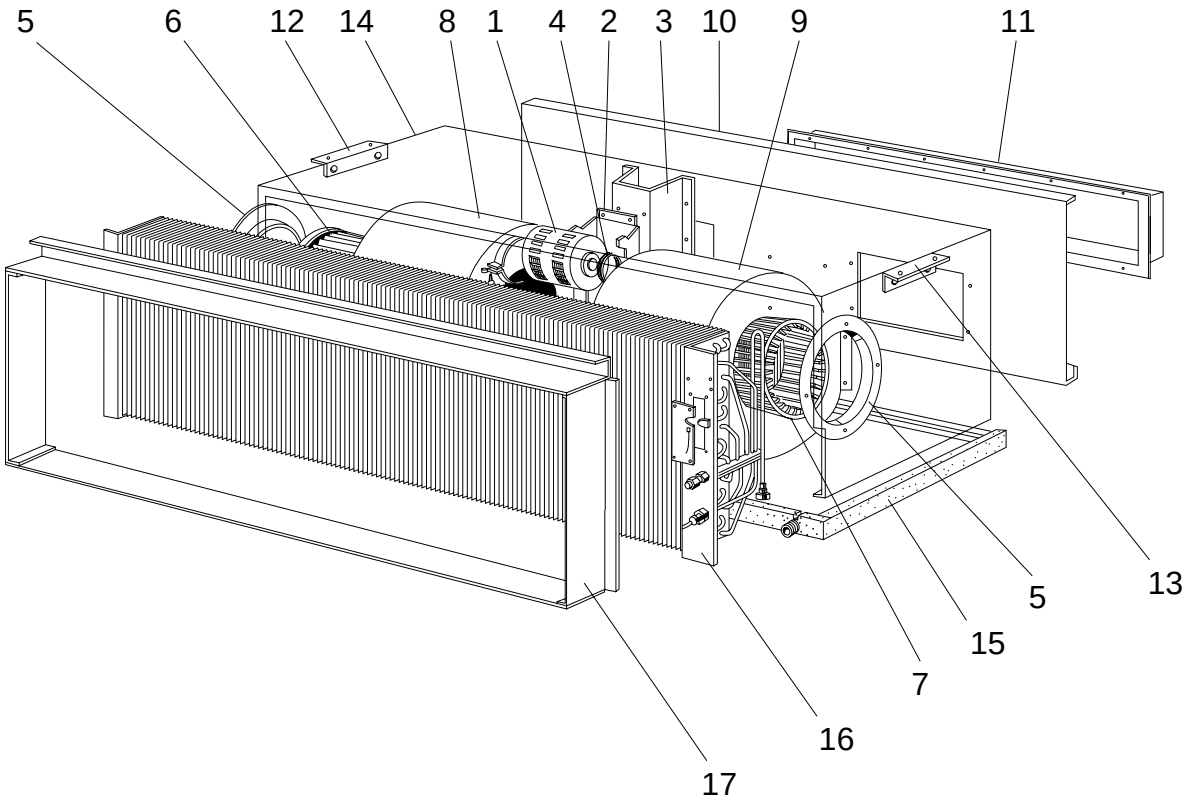
No.	Part No.	Part Name	Specification	Q'ty/set	Remarks (Drawing No.)	Wiring Diagram symbol	Recommended Q'ty	Price	
				PE-3				Unit	Amount
				EJA1.TH, EJA2.TH, EJA3.TH					
1	E07 027 300	INDOOR FAN MOTOR	PA6V205-E8	1		MF1			
2	—	CASING		1	(R300B098F04)				
3	—	BELL MOUTH		1	(R302D730G01)				
4	E07 018 500	SIROCCO FAN		1					
5	E07 018 808	LEG		2					
6	—	FAN PLATE		1	(BA02G745G10)				
7	—	CABINET ASSY		1	(BG00T021B01)				
8	—	AIR OUTLET DUCT FLANGE		1	(BA00H896G08)				
9	—	AIR INTAKE DUCT FLANGE		1	(BB02R503G10)				
10	—	FAN MOTOR LEG		1	(R302G070G01)				
11	—	MOTOR BEAM		1	(BA02L499G04)				
12	E07 018 505	RUBBER MOUNT		2	2PCS/SET				
13	E07 018 700	DRAIN PAN		1					
14	E07 027 620	HEAT EXCHANGER		1					

STRUCTURAL PARTS
PE-4EJSA1.TH
PE-4EJSA2.TH



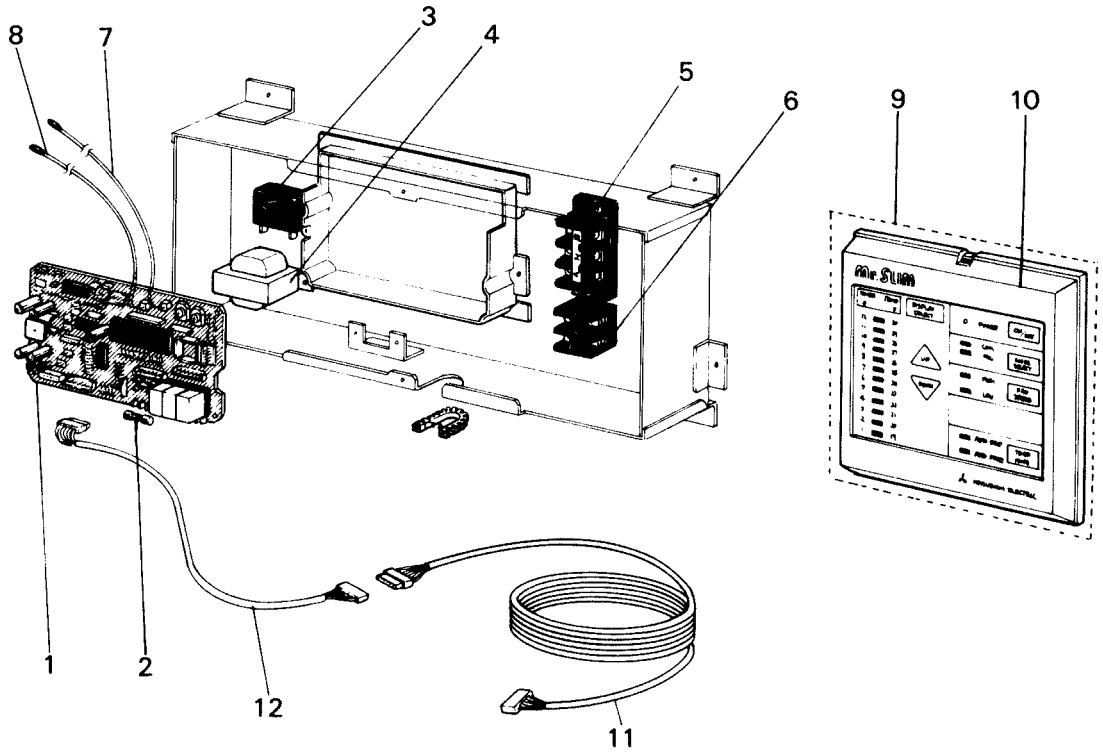
No.	Part No.	Part Name	Specification	Q'ty/set	Remarks (Drawing No.)	Wiring Diagram symbol	Recommended Q'ty	Price	
				PE-4				Unit	Amount
				EJSA1.TH, EJSA2.TH					
1	E07 028 300	INDOOR FAN MOTOR	PA6V305-EA	1		MF1			
2	E07 018 505	RUBBER MOUNT		2	2PCS/SET				
3	E07 022 500	SIROCCO FAN		1					
4	—	FAN MOTOR LEG		1	(BB00L212G04)				
5	—	MOTOR BEAM		1	(BB02T248G02)				
6	—	BELL MOUTH		1	(R302D730G01)				
7	—	CASING		1	(BA00N328G08)				
8	—	CABINET ASSY		1	(BG00T022B01)				
9	E07 018 808	LEG		2					
10	—	FAN PLATE		1	(BB02G686G05)				
11	—	AIR OUTLET DUCT FLANGE		1	(BA00H896G09)				
12	—	AIR INTAKE DUCT FLANGE		1	(BB02G810G05)				
13	E07 022 700	DRAIN PAN		1					
14	E07 028 620	HEAT EXCHANGER		1					

STRUCTURAL PARTS
PE-5EJSA1.TH, 6EJSA1.TH
PE-5EJSA2.TH, 6EJSA2.TH



No.	Part No.	Part Name	Specification	Q'ty/set		Remarks (Drawing No.)	Wiring Diagram symbol	Recommended Q'ty	Price	
				PE-5 EJSA1.TH EJSA2.TH	PE-6 EJSA1.TH EJSA2.TH				Unit	Amount
1	E07 029 300	INDOOR FAN MOTOR	PA6V400-ED	1	1		MF1			
2	—	FAN MOTOR LEG		1	1	(BB00L212G04)				
3	—	MOTOR BEAM		1	1	(BB02L182G04)				
4	E07 018 505	RUBBER MOUNT		2	2					
5	—	BELL MOUTH		2	2	(R302D730G01)				
6	E07 018 500	SIROCCO FAN		1	1					
7	E07 023 500	SIROCCO FAN		1	1					
8	—	CASING		1	1	(R300B098F04)				
9	—	CASING		1	1	(R300B098F05)				
10	—	FAN PLATE		1	1	(BA02N472G05)				
11	—	AIR OUTLET DUCT FLANGE		1	1	(BA00H898G10)				
12	E07 018 809	LEFT LEG		1	1					
13	E07 018 808	RIGHT LEG		1	1					
14	—	CABINET ASSY		1	1	(BG00T022B04)				
15	E07 023 700	DRAIN PAN		1	1					
16	E07 029 620	HEAT EXCHANGER		1						
	E07 030 620	HEAT EXCHANGER			1					
17	—	AIR INTAKE DUCT FLANGE		1	1	(BB02L116G12)				

ELECTRICAL PARTS
PE-3EJA1.TH, PE-4EJSA1.TH, PE-5EJSA1.TH, PE-6EJSA1.TH
PE-3EJA2.TH, PE-4EJSA2.TH, PE-5EJSA2.TH, PE-6EJSA2.TH
PE-3EJA3.TH



No.	Part No.	Part Name	Specification	Q'ty/set PE-3,4,5,6 EJ(S)A1.TH, EJ(S)A2.TH, EJA3.TH	Remarks (Drawing No.)	Wiring Diagram symbol	Recommended Q'ty	Price Unit	Price Amount
1	E07 027 447	INDOOR CONTROLLER BOARD		1	※1	I.B			
2	E07 006 382	FUSE	250V 6.3A	1		F1,2<I.B>			
3	E07 018 351	INDOOR FAN CAPACITOR	8.0μF/440VAC	1		C1			
4	E07 027 339	TRANSFORMER		1		T			
5	E07 006 375	TERMINAL BLOCK	3P (L, N, ⏚)	1		TB1			
6	E07 007 375	TERMINAL BLOCK	2P (1, 2)	1		TB2			
7	E07 027 308	ROOM TEMPERATURE THERMISTOR		1		RT1			
8	E07 027 307	INDOOR COIL THERMISTOR		1		RT2			
9	E07 027 426	REMOTE CONTROLLER		1		R.B			
10	E07 027 088	REMOTE CONTROLLER COVER		1					
11	E07 027 089	REMOTE CONTROLLER CABLE	10m	1					
12	E07 027 087	CABLE (FOR BOARD)	0.5m	1					

※1 : [CONTROLLER CASE] is made together with INDOOR CONTROLLER BOARD.

14 OPTIONAL PARTS

1. REFRIGERANT PIPES

Service Ref. : PE-3EJA2.TH / PE-3EJA3.TH

Part No.	PAC-05FFS-E	PAC-07FFS-E	PAC-10FFS-E	PAC-15FFS-E
Pipe length	5m	7m	10m	15m
Pipe size O.D.	Liquid : ø9.52 Gas : ø15.88			
Connection method	Indoor unit : Flared Outdoor unit : Flared			

Service Ref. : PE-4EJSA 2.TH, PE-5EJSA 2.TH, PE-6EJSA 2.TH

Part No.	PAC-SC51PI-E	PAC-SC52PI-E	PAC-SC53PI-E	PAC-SC54PI-E
Pipe length	5m	7m	10m	15m
Pipe size O.D.	Liquid : ø9.52 Gas : ø19.05			
Connection method	Indoor unit : Flared Outdoor unit : Flared			

Note 1. How to connect refrigerant pipes.
Factory supplied optional refrigerant piping contains refrigerant at the above atmospheric pressure. As long as connection takes no more than 5 minutes, no air will enter, and there will be no need for air purging.
Remove the blind caps and make the connections within 5 minutes. After the connections for the indoor and outdoor units are made, open the stop valve on the outdoor unit to allow refrigerant gas to flow.
If piping length exceeds 20m, an additional charge of refrigerant is needed.

Note 2. The following main parts are contained in the optional refrigerant piping kit.
Heat insulating cover, vinyl tapes, nipples, sleeve, flange (for wall hole).

2. REMOTE CONTROLLER EXTENSION CABLE

When installing the remote controller at a distance from the air conditioner, use the designated extension cable with connector.

Part No.	PAC-905EC	PAC-906EC	PAC-918EC	PAC-919EC
Length	12m	20m	30m	50m

3. TIMER

When using a program timer, a program timer adapter (PAC-825AD) is also needed.

Part No.	PAC-SK65PT (with set back function)
Model Name	Program timer

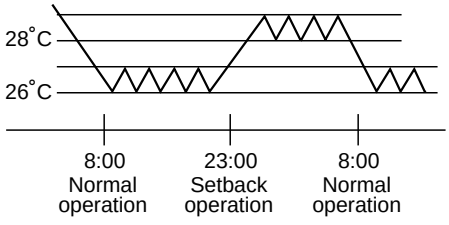
3-1 Program timer specifications

Part name	Program timer
Part No.	PAC-SK65PT
Exterior dimensions	120 x 120 x 15mm
Installation	Wall mount
Type of clock	Quartz
Clock accuracy	±50s / month
Display - Time - Week - Timer	Liquid crystal display Liquid crystal display Liquid crystal display
Program cycle	24 hours
Timer setting unit	30 minutes
No. of set points	48 / day
Power rating	5V DC
Set back function	Provided

3-2 Feature of program timer

(1) Daily timer function
Daily timer can be set in 30 minute units up to 24 hours.
Each unit can be set for unit ON, unit OFF, or setback operation.

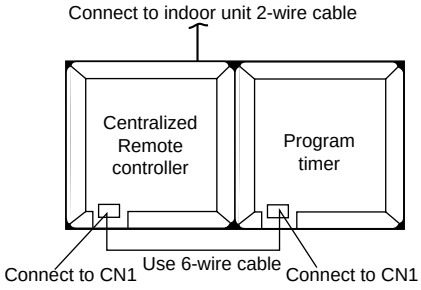
(2) Setback operation. (PAC-SK65PT)
Set back operation is useful for reducing running costs
e.g. : At a hotel with a 24-hour system
8:00~23:00 Cooling operation with set temperature at 26°C
23:00~8:00 Setback operation with 2 degrees of setback
As shown in the chart on the right, the set temperature rises 2 degrees automatically during the setback operation. When the setback operation ends, normal operation will begin.



(3) Weekly timer function
Daily timer function can apply to each day of the week.

3-3 How to connect program timer

(1) Install the program timer next to the remote controller the same way as the remote controller is installed.
(2) Connect the program timer and the remote controller with a 6-wire cable as shown in the figure below



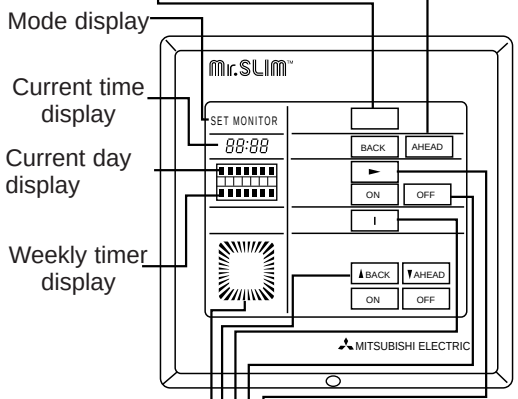
NOTE : While the program timer is connected to the remote controller, the 24-hour ON / OFF timer on the remote controller will not operate.

3-4 Names and functions

<PAC-SK65PT>

Mode selector button : Use this button to select "MONITOR" or "SET" mode.
"MONITOR" : Indicates the current timer setting. All buttons except SET/MONITOR will not work. This is the normal status.
"SET" : "SET" is used to set the time, change of day of the week, and program the daily and weekly timer.

Clock adjustment button : Used to adjust the current time. Press AHEAD button to advance the time. Each time the button is pressed the time advances by 1 minute, and pressing continuously advances 1 minute at a 0. 5 second interval. When the lower digit of the minutes becomes 0 the indication advances in 10 minute units. BACK button is used for reversing the time. Each time the button is pressed the time reverses by 1 minute, and pressing continuously reverses the time by 1 minute at a 0. 5 second interval. When the lower digit of the minute becomes 0 the indication reverses in 10 minutes units.



Day setting button : Used to set the day of the week.
Pressing ▶ button changes the day.
light displays in the order of S → M → T → W.

NOTE : display above is only an example.

Weekly timer button : Used to set the weekly timer.
Set back button : Used to set the set back amount.
Set back can be set in the range of 1 to 9°C in 1°C unit.

Daily timer button : Used to set the daily timer in 30 minute units.

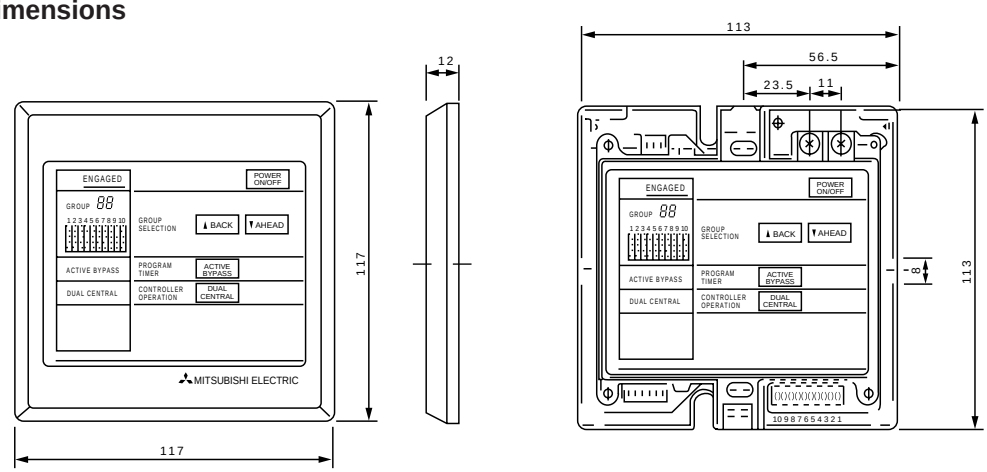
4. CENTRALIZED REMOTE CONTROLLER

Allows individual or combined control of up to 16 units.

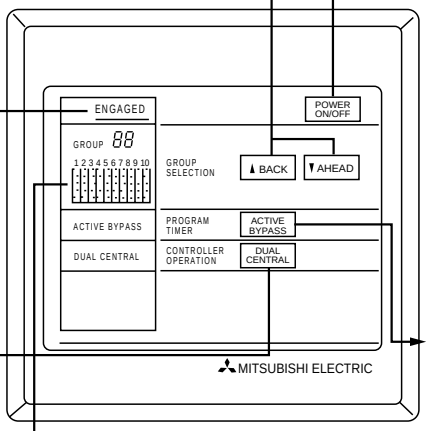
Part No.	PAC-805RC

4-1 Dimensions

Unit : mm



4-2 Names and Functions



"ENGAGED" indicator
When this indicator is lit, transmission is in progress and all switches are inoperative.

DUAL/CENTRAL switch
This change-over switch controls the operation of the accessory remote controller.

"DUAL"
Instructions from both the accessory remote controller and the centralized remote controller are valid. (Priority is given to the last instruction received.)

"CENTRAL"
ON/OFF switching by the accessory remote controller is invalidated. Operation is controlled by the centralized remote controller only.
Initial setting is "DUAL".

LCD Matrix Display
This display indicates the operational status of all connected units either by steady lighting or by flashing.

POWER ON/OFF switch
Operation ON/OFF switch.

▲BACK ▼AHEAD buttons
These buttons are used to designate the attached unit(s). (They designate the unit to be centrally controlled.)

- When group “00” is designated; collective ON/OFF instruction is sent to all units.
- When group ¨01¨ - ¨16¨ is designated; ON/OFF instruction is sent only to the designated units.

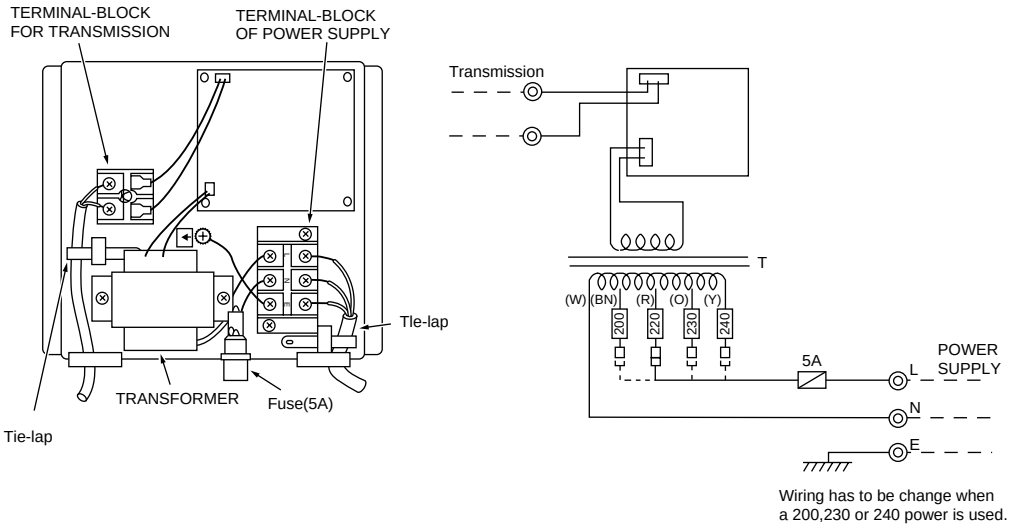
ACTIVE/BYPASS switch
This change-over switch for the program timer.
(It selects the timer operation on the program timer.)
Use “BYPASS” when a program timer is not connected.
“ACTIVE”
The switch turns ON / OFF commands given from the program timer automatically.
“BYPASS”
ON / OFF Operation is controlled by the centralized remote controller only.
Initial setting is “BYPASS”.

Independent “DUAL / CENTRAL” and “ACTIVE / BYPASS” setting of all the groups is possible. When power supply to the centralized remote controller is cut, due to a power failure, for example all settings return to original “DUAL” and “BYPASS”.

4-3 Connection method

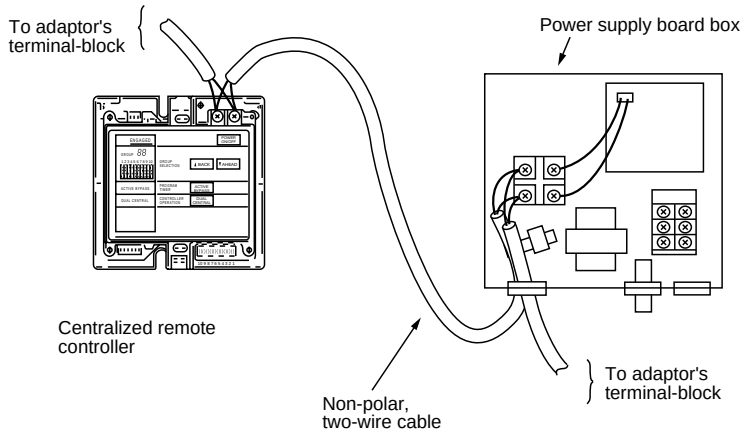
(1) Connections in the power supply cord.

1. Connect the power supply cord to the power supply terminal-block and fix it in-place with a tie-lap.
   Connect a single phase 200V AC (220, 230, 240V) to Ⓛ Ⓝ.
   As Ⓔ is the GND terminal, be sure to ground the earth wire.
2. Connect the transmission line to the transmission terminal-block and fix it in-place with a tie-lap.
   Use a Ø1.6 (AWG 14) or above two-wire cable for the transmission line.
   CAUTION : Never connect the power supply cord to the transmission terminal-block.

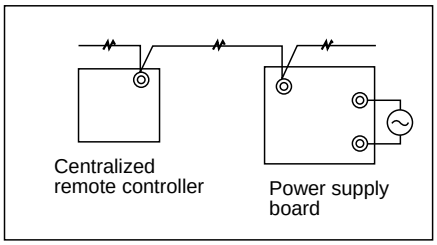


(2) Connection method of centralized remote controller and power supply board.

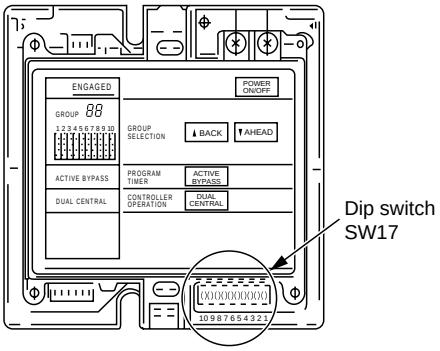
1. Connect the centralized remote controller and power supply board with a non-polar, two-wire cable.



2. Wiring diagram



3. Set the max. address number with the dip switch SW17 of the centralized remote controller.

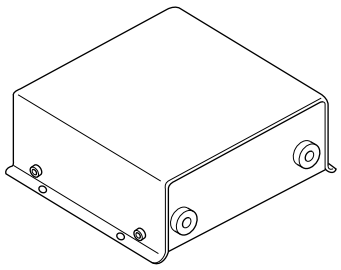
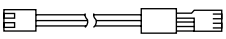
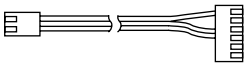
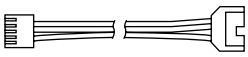
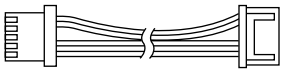


5. PROGRAM TIMER ADAPTER

This adapter is needed when a program timer (PAC-SK65PT) or the centralized remote controller (PAC-805RC) is used.

Part No.	PAC-825AD

5-1 Parts included

① ADAPTER·····1P	② 3-core cable ·····1P	③ 3-core cable ·····1P
	 Length : 2m (6' 7")	 Length : 2m (6' 7")
	④ 4-core cable ·····1P	⑤ 5-core cable ·····1P
	 Length : 2m (6' 7")	 Length : 2m (6' 7")

5-2 Connection method

Connection and wiring methods differ with the type of the indoor unit used. Confirm the type before carrying out the work.

(1) Connections in the adapter Box

1. Connect the power supply cord to the terminal-block and fix it in-place with a tie-lap.
   Connect a single phase 200V AC (220, 230, 240V) to Ⓛ Ⓝ.
   As ⏚ is the GND terminal, be sure to ground the earth wire.
2. Connect the transmission line to the transmission terminal-block and fix it in-place with a tie-lap, when a centralized remote controller is being used.
   CAUTION : Never connect the power supply cord to the transmission terminal-block

fig.1

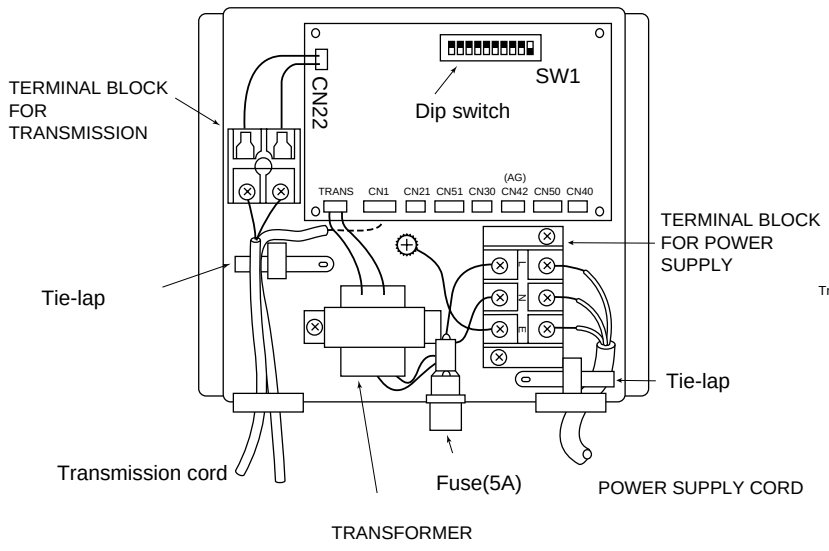
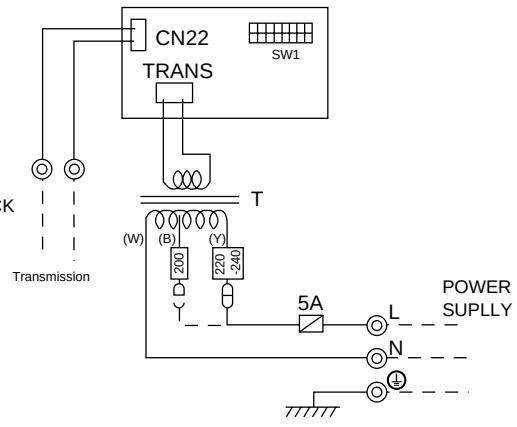
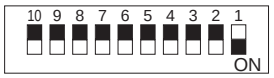


fig.2



(2) Set the address number (from SW1-1 to SW1-6) in the dip switch when a centralized remote controller is being used.
The address is the control number of each unit in the centralized control system.
As the address serves as a time-delay device as well, sequential starts (all units are triggered collectively by one single ON instruction)must be set with different address numbers (greater than 0) for each adapter.

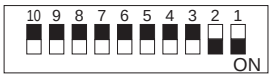


SW1

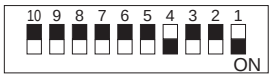
Levers No. 1-6 can set the following addresses respectively with binary notations.

Toggle	No.6 ON	No.5 ON	No.4 ON	No.3 ON	No.2 ON	No.1 ON
Address	32	16	8	4	2	1

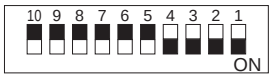
(Ex.1) 3 = 2 + 1



(Ex.2) 9 = 8 + 1

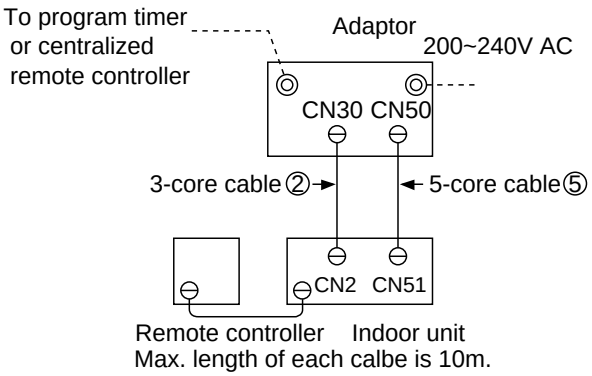


(Ex.3) 15 = 8 + 4 + 2 + 1



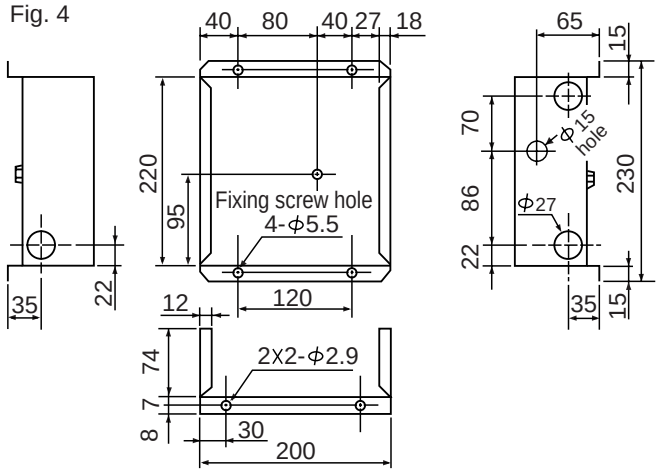
(3) Connection from adaptor

Fig.3



5-3 Dimensions

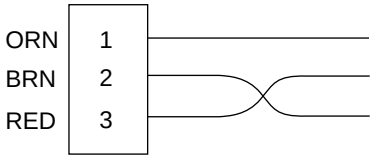
Fig. 4



6. TIMER ADAPTER

This adapter is needed for system control and for operation via external contacts.

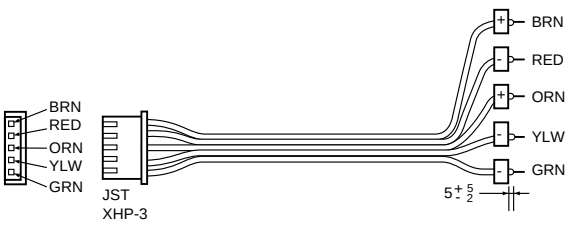
Part No.	PAC-SA89TA-E

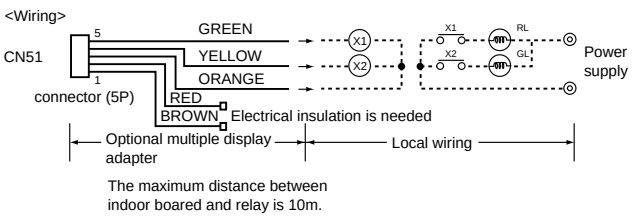


7. REMOTE INDICATION ADAPTER

This adapter is used for remote indication (operation / check).

Part No.	PAC-559AD





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HEAD OFFICE MITSUBISHI DENKI BLDG.MARUNOUCHI TOKYO100-8310 TELEX J24532 CABLE MELCO TOKYO

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Issued in Jul. 2000. No. OC155 REVISED EDITION-B 1540
Issued in Dec.1997. No. OC155 REVISED EDITION-A 670
Issued in Sep.1997. No. OC155 860
Printed in Japan.

New publication, effective Jul. 2000.
Specifications subject to change without notice.